

SECOND EDITION

CUISINE AND CULTURE

A History of Food and People

LINDA CIVITELLO



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ANTIPASTO
ANTOJITOS
AMUSE-BOUCHES

FOOD FOR THOUGHT

We think, dream and act
according to what
we eat and drink.

—F.T. MARINETTI,
FUTURIST POET

WHAT DOES FOOD MEAN?

What did you have for dinner last night? Or did you call it supper? Whatever it was, future generations will know much less about it than about what people ate at the celebrations of Julia Child's ninetieth birthday. But which meal is more representative of the way most people in the United States eat? One enormous difference is that Julia Child's birthday dinners were eaten sitting down at a table, not while driving in the car, standing at the sink, working on the computer, or in front of the television.

What is the meaning of food? We humans live by symbols; they help us to make sense of the world, to organize and give meaning to our existence. Our alphabets are symbolic: we agree that a certain symbol stands for a certain sound. Time is another human invention: daylight, standard, leap year. Christianity's year 2006 is Judaism's 5765, Islam's 1427, and China's 4703. Nobody needed a nanosecond until Bill Gates and computers came along at the end of the twentieth century. So, too, we give food meaning far beyond its survival function. It has been used in rituals to guarantee fertility, prosperity, a good marriage, and an afterlife. It has been used to display the power and wealth of the state, the church, corporations, a person.

Food is one of the ways humans define themselves as civilized. But "civilized" is a slippery concept, very much in the eye of the beholder. For example, civilized people use utensils—forks, knives, spoons, chopsticks. Unless they're eating with their hands. Civilization has been used as a reason for vegetarianism—not eating meat elevates humans and separates them from "savages." But notorious vegetarians include mass murderers like Robespierre, the leader of the Terror that followed the French Revolution, and Hitler. Overcoming prejudices about what is civilized can be difficult or impossible, even when survival is at stake. During WWII, starving American servicemen could not bring themselves to eat nutritious insects.

Identity—religious, national, ethnic—is intensely bound up with food. Every group thinks of itself as special and exceptional and uses food to show it. The French identity is connected to white bread, while southern Italians insist on tomato sauce. This identification can also take the form of a negative, in foods that are excluded: "*We* don't eat that. *They* [religion, country, ethnic group] eat that." Some examples are the Jewish and Muslim avoidance of pork, and the Buddhist taboo on beef.

Food can be a political weapon. After the French objected to the United States invasion of Iraq, some Americans refused to eat French fries, but had no problem with Freedom fries—the same food, just renamed. Throughout history, people of one country have used food as a way—usually not complimentary—to refer to people of another country. When the British found that limes were a cure for the vitamin C deficiency, scurvy, they became "Limeys." The French ate frog legs, so they were called "Frogs." Germans' love of cabbage branded them "Krauts."

Everything about how humans cook and eat has meaning: who is allowed to fish for it, farm it, mill it, or kill it; what vessels and utensils are used in the preparation; what time of day the meal is eaten; who sits where at the table (if you're eating at a table), how close to an important person, a certain food, the salt, a person of another gender, race, or class; what order the food is served in; who serves it; whether it is hot or cold, cooked in water or by direct fire. In European and American cultures, serving a whole boiled chicken at an important occasion would be an insult, while in Taiwan, it is the centerpiece of a banquet.

WHEN IS AN APPLE NOT JUST AN APPLE?

Does an apple represent the Biblical apple that Eve took from the forbidden tree in the Garden of Eden? Or is it the apple a day that's supposed to keep the doctor away? Maybe it's the poison apple the jealous

queen gave to Snow White. Could it be the Apple of Discord that led to the Trojan War? The Golden Apples of immortality that Alexander the Great was looking for?

Alcohol, too, is used differently in different cultures. For Jews and Christians, wine has always been a crucial part of the religion. In ancient Greece, wine was consumed after the meal at a symposium, a religious and political ritual attended only by men. In ancient Rome, men and women drank wine with the meal. Americans couldn't wait for the meal and invented the cocktail.

Whether you take your tea with sugar, cream, and small sandwiches in the middle of the afternoon, green in a special ceremony, iced, call it "chai," or use the leaves to smoke foods or tell your fortune depends on where you are—England, Japan, the U.S., India, China, or Turkey. If you think cinnamon is a hot spice that belongs in a meat sauce, you're in western Asia. If it's a sweet sprinkling on a breakfast bun, you're in Europe or North America.

Let's take a look at an average household in two cultures that seem the same. Both spend a great deal of money on plants and take great pride in their landscaping. Both keep animals. Both have habitats for fish. But in the first culture, everything is for food. The plants and animals are edible and the artificial ponds are stocked with fish for eating. In the second culture, everything is for show. The plants are ornamental, the animals are pets, and the fish in the aquariums are expensive, exotic, and inedible. The first culture is ancient Rome; the second is the United States. The Romans had words for meadow and grass (herba), because those were places where sheep could graze. But a lawn, which is a holdover from European estates 300 to 400 years ago, would have made no sense to them. These are vast differences in culture and in humans' relationship to nature and to their food supply.

THE CHEF IN HISTORY

The role of the chef has changed profoundly, too, from the anonymous cooks of ancient times to the celebrity chefs of today. The duties and status of other people involved in food preparation have also changed. Originally, butchers killed animals. With industrialization, butchers now cut the already killed animals into pieces. In some cultures, like ancient India, butchers were considered "unclean" and were of very low status. But in Jewish communities in Eastern Europe in the nineteenth century, butchers were valued because they had food. Parents were happy to have their daughter marry a butcher, because she would never starve.

Printed cookbooks have existed for only about 500 years, but chefs wrote them for other chefs and didn't use specific amounts and instructions until about 250 years ago. Cooking schools began a little more than 100 years ago, in France. Although throughout history, most cooking in the home was done by women, women chefs are recent arrivals, from the middle of the twentieth century.

WHAT IS TASTE?

There is no one food that is consumed by everyone on earth. Taste is determined by culture, anatomy, and genetics. Almost everything we eat, and when, and where, is culturally determined, so taste is taught. Some people pay top dollar for escargot in fine restaurants while others stomp on the same snail when they find it in the garden. One person's haute cuisine is another person's pest.

Taste is also anatomically determined. Scientists categorize people as "tasters" or "non-tasters." Which category you fall into depends on how many taste buds you have on your tongue—an inherited trait. Non-tasters with few taste buds don't taste bitter foods like grapefruit and broccoli very intensely. They can eat chile peppers and not suffer. Tasters, on the other hand, have many more taste buds and are sensitive to bitter and sweet tastes, and to sensations like carbonation and fat. Then there are "super-tasters," people whose tongues are covered with taste buds and who are extremely sensitive.[1]

"We are what our ancestors ate and drank,"[2] according to Gary Nabhan, director of the Center for Sustainable Environments at Northern Arizona University. If our ancestors lived in one area for a long time, then chances are good that we are genetically adapted to the food from that environment. When our ancestors moved to a place with different plants and animals, they were exposed to unfamiliar foods. Our bodies can react to new foods negatively, with allergies or illnesses. But we can force ourselves, or cultural conditioning can influence us enough, to overcome our dislike of some foods—even ones that cause pain, like chile peppers. So we come full circle, back to taste is taught.

Another problem is that the food in times past did not taste the same as our food, and we will never be able to reproduce it. For example, most of the vineyards of Europe were destroyed by an insect parasite, *phylloxera,* in the second half of the nineteenth century. The rootstock is different now, and so is the taste.

1. Nabhan, *Why Some Like It Hot,* 119–123.
2. *Ibid.,* 30.

WAR AND FOOD

Wars change things profoundly: the work force, which was often also the farmers, goes off to fight, leaving the fields to women; boundaries change; the food supply is interrupted. Or food is used outright as a weapon: control the food supply and you win the war. The wars have been numerous, including nine world wars (see Appendix C), while the periods of peace have been so few that historians have named them, like the *Pax Romana*—Roman Peace—of the Roman Empire.

HISTORIOGRAPHY: A BRIEF HISTORY OF FOOD HISTORY

Food history is a new field. The first comprehensive work, British author Reay Tannahill's *Food in History,* was not published until 1973. Maguelonne Toussaint-Samat's *A History of Food* appeared in 1987, but her book was not translated into English (by Anthea Bell) until 1992. The anthology, *Food: a Culinary History from Antiquity to the Present,* edited by Jean-Louis Flandrin and Massimo Montanari, was published in 1996. It took three years and seven translators for the English version to appear. The focus of all of these books is European; the editors of the latter two are Renaissance and medieval specialists, respectively.

In the years since the first edition of this book, there has been an explosion of serious books about food. Chief among them is *The Oxford Companion to Food and Drink in America,* edited by Andrew Smith and with many entries written by him, in addition to all of his other books. I incorporate as much of the new research as possible, but there are still gaps in our knowledge either because sources are missing or because they haven't been translated yet. Until very recently, books that were translated were also adapted for modern kitchens, like the 1958 version of Poland's *The Universal Cook Book*. Unfortunately, this reduces their historical value. Even a book in English, like *Martha Washington's Cook Book,* originally from the eighteenth century but printed in 1940 to capitalize on the Southern plantation mania generated by *Gone With The Wind* the previous year, was altered. The portions were too large, and "some of the recipes are scarcely in accordance with modern taste or practice."[3] It was not until Karen Hess's edition and essay in 1981 that historians could see the original and have it explained.

3. Kimball, *Martha Washington's Cook Book,* 52.

Food historians have spent great portions of their lives studying one subject—Charles Perry's astounding knowledge of medieval Arab and Mongolian cuisine, and twentieth-century California cuisine; Clifford Wright on the Mediterranean; Claudia Roden on Arab food; Najmieh Batmangli's beautiful books and sentiments on Persian food; Betty Fussell on corn. This book cannot go into that kind of depth, but I hope it will whet your appetite to look further into other works. Please use the notes and the bibliography at the end of the book to find out more. This entire book is an appetizer, a broad overview to put food in historical, political, social, economic, anthropological, and linguistic context.

WHAT'S NEW IN THE SECOND EDITION

Throughout the book, a new feature, Crossing Cultures, has been added. This gives thumbnail sketches of foods and customs across cultures, like New Year celebrations and filled dumplings. There are more holiday histories (*Selametan,* Halloween/Dia de los Muertos, etc.), food fables (Spices and Rotten Meat, etc.), food chronologies (wine, tea, etc.), recipes/ingredients, kitchen technology, and more cuisines and cultures, especially of Asia. Empires have been added: Byzantine, Portuguese, Turkish/Ottoman, Austro-Hungarian. There are period maps and more photographs.

The First Course has more information about ancient Mesopotamia, including a touching memorial holiday called Kispu. The Third Course adds Vikings, and the Byzantine Empire and its customs, including books for the wealthy that prescribed what to eat and do throughout the year to guarantee health. The first European explorers, the Portuguese, appear in the Fifth Course, in their fifteenth century search for "Christians and spices," which led them to India, Indonesia, and Japan. The Sixth Course goes more deeply into the West African–American South female rice culture connection and also adds the Scandinavian countries and their festivals, including the native people, the Sami (formerly Laplanders). There is more of Napoleon in the Seventh Course, and Florence Nightingale begins to reclaim her rightful place in food history and military cooking in the Eighth Course. Information on modern scientific genetic modification of food begins in the Ninth Course with Mendel and the Austro-Hungarian Empire of his time, and the American Luther Burbank, and culminates with a chronology in the Twelfth Course. The expanded Tenth Course has more information on Polish-Americans and new information on Greek-Americans. It also includes more about food adulteration and the origins of the U.S. Food and Drug Administration, including the U.S. government's lawsuit against Coca-Cola. Restructur-

ing of the Tenth Course brings it through the end of World War I, the fall of the Ottoman and Austro-Hungarian empires, and the Treaty of Versailles in 1919. The Eleventh Course now begins with the post-WWI period, the Roaring Twenties, and ends with the 1950s and a Finnish-American food festival invented in 1956 and still celebrated today. The Twelfth—and final—Course now begins with the food revolutions of the 1960s—Green and Blue, among others. Globalization is addressed through McDonald's in China. A new section deals with the genetic modification versus organic debate, and speculation on the future of food.

FORBIDDEN FRUIT

We humans are restless creatures, curious and greedy. We want to see what's on the other side of the hill, down the river, in the cave. How else to explain that the Latin word for bread, *panis,* ended up in Japanese crumbs, *panko,* courtesy of the Portuguese; why the name for a favorite Swedish food, *stuffed cabbage,* is half the Swedish word for cabbage, *kål* and half the Greco-Turkish word for stuffed vegetable, *dolmar;* or why the word for tomato is the same in Italian, *pomodoro,* and in Polish, *pomidory?*

What we believe about food has changed over time. Once, people knew for sure that potatoes caused leprosy and sugar cured toothaches. Romans believed that cinnamon grew in swamps guarded by giant killer bats. Americans thought beer was a really good drink for children. A princess was laughed out of town because she dared to use a fork. And Italian food was very, very bad for you. It's all true, and it's all here. Keep reading.

This book is the short version of the long story of the greatest predator on planet Earth—humans. The Greek philosopher Socrates said, "The unexamined life is not worth living." So let's examine these human creatures, from the African savanna to the kitchens of California, and see what we did with our food along the way.

HISTORY ISN'T PRETTY

Reading history takes imagination. We have to forget all of our current comforts and cherished beliefs and leap into the past. Sometimes it isn't pretty back there. People treated each other then in ways that are unthinkable now and can still make us angry. In the Byzantine Empire and China, any man who dealt with the royal harem—like the chef—was castrated. The Romans fed Christians to the lions for entertainment. When Christians gained power, they enslaved millions of Africans, Na-

tive Americans, and Asians because they weren't Christian. Hindus and Muslims have been—and still are—involved in religious wars all over the world. Throughout most of history, women were defined by their ability to bear children. Until recently in the United States, the famous "rule of thumb" said it was legal for a man to beat his wife with a stick, as long as it wasn't thicker than his thumb. The Nazis killed six million Jews, and sterilized thousands of alcoholics. Until 1949, when the all-black Harlem Globetrotters beat the all-white Minneapolis Lakers for the *second* time, most Americans believed that black people were physically incapable of playing basketball.

Our cuisines and cultures would be as much science fiction to people from earlier times as theirs sometimes seem to us. It would be nice to be able to go back into the past and change these injustices, but we can't. These are facts, documented in the notes throughout the book. All we can do is be grateful to the people before us who worked so hard or gave their lives to allow us to enjoy ours, and keep an eye out for what we can do now to make the planet a better place to live. For some, that means organic and sustainable food. For others, it means scientifically altering food to feed more people. If you've ever eaten an Idaho potato, ruby red grapefruit, wheat, corn, or an apple, or cooked with canola oil, you've eaten genetically modified food. From the beginning, it's all been genetically modified, and it's all been fusion.

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First Course

From Raw to Cooked: PREHISTORY, MESOPOTAMIA, EGYPT, CHINA, INDIA

PREHISTORY

Animals don't cook. The ability to use fire is one of the crucial things that separates us from them. Scientists used to think that humans were different from animals because we use tools and have language. Then we discovered that animals use tools and can communicate with each other and sometimes even with us, like Koko, the gorilla who learned sign language. As Stephen Pyne, the world's leading authority on fire, points out, there may be "elements of combustion" on other planets, but so far, "We are uniquely fire creatures on a uniquely fire planet."[1]

Humans Learn to Find Foods: Hunting and Gathering

Scientists believe that humans evolved for millions of years before they learned to use fire about 500,000 to one million years ago. The oldest fossils so far, excavated mainly in Africa, put the beginning of human-like creatures—hominids—at between six and seven million years ago.[2] From the jaws and teeth of these hominids, scientists deduce that they were primarily plant eaters—herbivores. Our back teeth, the molars, are flat like stones for grinding grain and plants and that is what we still use them for when we chew. Scientists think that over millions of years,

early humans developed two survival advantages: (1) between 4 million and 1 million B.C., human brain size tripled, growing to what it is today, approximately 1,400 cubic centimeters; and (2) they stood upright on two feet—became bipedal—which allowed them to see farther and left their hands free to use weapons for protection and to kill animals for food. Food historians speculate that early humans learned to like the taste of meat from small animals that could be caught and killed easily, like lizards and tortoises, and from scavenging the leftover carcasses of large animals killed by other large animals.[3]

These early humans were hunter-gatherers, nomads who followed the food wherever it wandered or grew. Between 40,000 B.C. and 12,000 B.C., Asian peoples went east and crossed into North and South America. The Ice Age had dried up the seas, creating dry land between Asia and Alaska, making it possible to walk from one continent to the other. So, the first people in the Americas were Asians.

Work related to food was divided by gender. Men left the home to hunt animals by following them to where they went for food, especially salt. Women gathered fruits, nuts, berries, and grasses because their lives revolved around a cycle of pregnancy, birth, and child rearing.[4] Gathering was more reliable than hunting. Becoming carnivores—meat eaters—probably helped humans survive, too. In case of a shortage of plants, there was an alternate food source. Now we were omnivores—we ate everything. We still have the front or canine teeth, sharp like a dog's for tearing meat, to prove it. However, human teeth weren't sharp enough to pierce animal hides. For that, something else was necessary—tools.

Scientists believe that humans invented tools about 1.9 million to 1.6 million years ago. Early humans butchered animal meat, even elephants, with blades made out of stone, which is why it is called the Stone Age (as opposed to the Bronze Age and the Iron Age, which came later). Archaeologists call these people *Homo habilis*—"handy man." Then, approximately 1.5 million to 500,000 years ago, another group appeared called *Homo erectus*—"upright man." These people migrated north to Europe and east to India, China, and Southeast Asia. They had better tools than any of the other groups. And for the first time, they had fire.

Humans Learn to Use Fire: Cooking versus Cuisine

Scientists speculate that lightning started a fire by accident, but humans figured out how to keep it going by appointing somebody keeper of the flame day and night, perhaps the first specialized job. For the first time, humans had a tremendous tool with which to control the environment. It kept night terrors and animals away. It was also sacred, "the only substance which humans can kill and revive at will."[5] The god who controlled lightning was usually the most powerful god in early religions. Most cultures have creation myths of how humans stole or were given

fire by the gods and how they were punished and suffered for this divine knowledge. Fire completely transformed food from raw to cooked, which allowed humans to eat otherwise indigestible foods and made food preservation possible. Control of fire gave humans control of their food supply—a huge survival advantage.

Once humans had fire, how did cooking begin? Perhaps by accident, although anthropologists are still arguing about this. One theory is that an out-of-control fire burned down a hut and accidentally cooked some pigs. People wandered in, tried the cooked meat, and liked it. Another theory is that a forest fire first roasted meat; still others think that cooking was a more deliberate, controlled act by humans.[6] In any case, now there were more options than raw bar and tartare.

It was cooking, but was it cuisine? Historian Michael Freeman's definition of cuisine is "a self-conscious tradition of cooking and eating . . . with a set of attitudes about food and its place in the life of man."[7] So, cuisine requires not just a style of cooking, but an *awareness* about how the food is prepared and consumed. It must also involve a wide variety of ingredients, more than are locally available, and cooks and diners willing to experiment, which means they are not constricted by tradition. Since early humans were still eating to survive, and had no control over their food supply, it was not cuisine.

We might never know exactly how people mastered fire and started cooking their food, we only know when—between 500,000 and one million years ago. Roasting over an open fire was probably the first cooking method. Pit roasting—putting food in a pit with burning embers and covering it—might have come next. Then spit roasting, when hunters came home with the animal already on a spear and decided to cook it by hanging it over the fire and turning it. With sharp stone tools, meat could be cut into smaller pieces to make it cook faster. Food could be boiled in large mollusk or turtle shells where they were available, or even in animal skins,[8] but pots were not invented until around 10,000 B.C. and there were no sturdy clay boiling pots until about 5000 B.C.[9] Cooking in such vessels would probably have produced bacterial contamination, since there was no soap and no effective way to clean them. Finally, scientists believe that *Homo sapiens*—"wise man," the direct ancestor of humans—appeared between one million and 100,000 years ago.

Humans Learn to Communicate: Dance, Speech, Art—Culture

Before language was invented, early humans spoke with actions. They danced, which dance historian Joan Cass defines as "the making of rhythmical steps and movements for their own sake (as against steps and movements done in order to go somewhere, to do work, or to dress oneself)."[10] They danced together in religious ceremonies to ensure fertility of humans and crops, for rain, for a successful hunt. If the dance

produced the result they wanted, they kept doing it exactly the same way again and again, turning it into a ritual. Music was added—beans or small stones in a pouch shaken or rattled, animal bones with holes drilled in them like a flute, maybe an animal skin stretched over a cooking pot to make a drum.[11] Then, about 100,000 years ago, we developed language. This, too, helped humans to survive. We could warn our tribe of danger, tell them where there was food, plan ahead and cooperate in work, name things and places, and generally organize the world, which is a step to controlling it.

Early art, too, was often communication connected to fertility and food. Small figures, women with exaggerated breasts and hips, were carved out of rock. Animals were painted on cave walls. A mask "changes your actual identity and merges you with the spirit that the mask represents."[12] This is called sympathetic magic. As Sir James Frazer points out in *The Golden Bough: A Study in Magic and Religion*, the principle at work is that "like produces like": if you make a symbol of what you want, it will happen. The woman will have a child, the hunt will be successful, the animal your mask represents will be found. You have control over these things because you have, in a sense, created them.[13] The animals most commonly represented in prehistoric cave paintings are horses, followed by bison, deer and reindeer, oxen, the ibex, then elephants and mammoths.[14] So food, art, and religion have been connected since the earliest human times—at least in France.

Prehistoric Human Achievements

When—B.C.	Where	What
500,000–1 million		Fire
Before 100,000		Dance
100,000		Speech
33,000	Chauvet, France	Cave paintings and other art
25,000–20,000	Willendorf, Germany	Stone sculpture—Fertility goddesses
18,000; 15,000	Lascaux, France; Altamira, Spain	Cave paintings and other art
14,000	Middle East	Dogs domesticated from wolves
Before 10,000	Japan	Pottery
8,000	Ice Age Ends—Agricultural Revolution Begins in the Middle East	

Corpses, Middens, and Coprolites

How do archaeologists know what happened before written history? How accurate is the information? The same scientific tools like DNA and mi-

croscopic analysis that solve crimes today can solve ancient mysteries. Much of what we know about early humans comes from three sources: corpses, their preserved bodies; middens, their garbage piles; and coprolites, their fossilized feces. Bodies have been found all over the world, preserved by drying in hot climates, by freezing in cold climates, and by bogs in wet climates. Overdeveloped bones in the right forearm tell us that these people threw spears.[15] Analyzing their intestinal tracts reveals what these people ate, and also that many of them had the same intestinal parasites that we still have today.[16]

From middens, archaeologists know that in some ways the eating habits of early humans were not that different from ours: they smashed or broke bones to get to the marrow, too. And they did it for the same reason—because they liked it, not because there was nothing else to eat.[17] Today, this is called osso buco, Italian for "bone with a hole." The difference is that early humans ate bone marrow with their hands while squatting around a fire, while osso buco is eaten with a silver marrow spoon in a fine restaurant. Many of the recipes in French master chef Escoffier's cookbook *Le Guide Culinaire* have marrow as an ingredient, even sweet puddings like his *Pouding à l'Américaine* (#4438) and *Pouding à la Moelle* (#4439). Broken jaw bones and pierced skulls indicate that early humans savored the taste of animal tongues and brains. The shells of shellfish like mussels and limpets also survive in middens, telling us that humans ate these as far back as 60,000 to 120,000 years ago.[18]

From coprolites, we know what foods early humans ate because we can see what they excreted. Seeds, fibers, and other indigestible matter ended up in the coprolite. In this way, the human digestive tract was also part of the food chain, helping plants to spread. From these methods, we know that wild crab apples were consumed 750,000 years ago in Kazakhstan, just north of modern Afghanistan.

Dating the items found in corpses, middens, and coprolites is done by several methods. Carbon dating measures the amount of radioactive decay in a life form. Tree ring analysis—dendrochronology—can reveal what the climate was like and how much rainfall occurred at certain times. Analysis of pollens can also help decipher ancient dates.

THE ANCIENT AGRICULTURAL REVOLUTION

The two most important factors that determine where life is hospitable to plants and animals, including humans, are geography and climate. When the Ice Age ended around 10,000 years ago, the last of the glaciers receded and the planet warmed up. This was the first of three major climate changes planet Earth has experienced. The other two were

the Medieval Warm Period (A.D. 950–1300) followed by the Little Ice Age, which ended about 100 years ago. Some scientists think that we are in a new period of global warming caused by pollution from gasses produced by car engines and machinery (the "greenhouse effect") and that we have to do something about it fast. Others think it is just part of a natural cycle. Still others think that climate is random and that a catastrophic change could occur suddenly for no reason and be completely out of the control of humans.

Humans Learn to Domesticate Foods: Sheep and Goats, Barley and Wheat

Gathering nuts and seeds and grasses and hunting wild game was unreliable, inefficient, and could support only a limited population. Humans wanted more control over their environment and a guaranteed supply of food, especially food they liked. So about 10,000 years ago, humans began to tame wild plants and animals. From the earliest times, food was bred to taste better, be hardier, and yield more—in other words, it was genetically modified. This was a time-consuming and difficult process, because all plants and animals have ways to defend themselves—husks and tusks, shells and spines. The first domesticated animals were sheep and goats, then pigs and cows.

After domestication came farming. Fire was a force here, too. Slash-and-burn agriculture is one of the oldest and simplest ways to clear the land of trees. Once used extensively by primitive tribes, it is still used today in some places, like Borneo. The process: slash the bark on the tree, which stops the sap from flowing and eventually kills the tree. The leaves die and fall off, allowing sunlight to filter onto the forest floor where the fallen leaves decompose into fertilizer. Then crops are planted. In two or three years, when the soil starts to show signs of being depleted of nutrients, the dead trees are burned, the ash provides fertilizer, and more crops are planted. Unfortunately, this requires constantly moving into new areas and destroying the forests.

The first cultivated plants were barley, then wheat (*Triticum*) from wild grasses. There are about 30,000 varieties of wheat.[19] Ancient wheats—emmer, spelt, einkorn—had several layers of protection, including a very hard inedible outer covering called chaff, which had to be roasted to be removed. Then friction had to be applied to the wheat to separate it from the chaff, a process called threshing. This was done by having oxen walk on the wheat, or by hitting it. The chaff was lighter than the wheat, so it could be blown or fanned away. Then the wheat had to be ground to make flour. This was done by hand until animals began to be used around 800 B.C. These flours were stone ground and coarse ground, and most likely still contained bits of chaff or fine particles of stone. The problem was that heating the wheat to remove the

chaff killed what makes it rise—gluten. So the earliest breads were flat, more like crackers. Some examples that still exist are Indian chapati, flour and water baked on a hot griddle; poori, also flour and water, but quick fried; and Jewish matzo, which is baked. An important change occurred about 7000 B.C.: wheat with a weaker chaff began to be grown, so the roasting step could be skipped and the gluten was free to rise.[20] Leavened bread was born, probably first in Egypt, and it was probably an accident.

Settling down and farming allowed humans to have some foods it is impossible to have if you are a nomad. One of these is wine. It takes two years before vines bear fruit, and there is a very short time frame, just a few days, during which the grapes have to be picked and crushed—until recently, by stomping on them. Then they must be kept at a temperature that will allow them to ferment, and stored. It is impossible to wander around and to make wine, too. So, two of the earliest professions were growing vines and making wine.[21]

Did domestication occur only once or more than once in different places? Some plants like barley, lentils, and rice seem to have been domesticated in multiple places. There is also evidence that pigs were kept around 7000 B.C. in the city of Jericho in the Near East and thousands of miles away on the island of New Guinea in the South Pacific.[22] Domestication altered some plants and animals so much that they became

THE ANCIENT AGRICULTURAL REVOLUTION

When—B.C.	Where	What
10,000	Southwest Asia	Wheat, barley, sheep, goats domesticated
8000	Mexico	Chiles and squash domesticated
8000	Peru	Lima beans domesticated
7000	Southwest Asia	Bread wheat developed; flax for fabric
7000	Southwest Asia and New Guinea	Pigs domesticated
6000	Northern China (first agriculture in China)	Millet domesticated
6000	Middle East[23]	Apples cultivated
6000–4000	Southwest Asia (modern Armenia)[24]	Grapes cultivated for wine
5000–6000	Southwest Asia	Cattle, chickpeas, lentils domesticated
5000	Yangtze River Delta, China; Central India	Rice domesticated
4000	Southwest Asia	Olives domesticated
3000	Southwest Asia	Cities, irrigation, wheel, plow, sail
2686–2181	Egypt	Pyramid building
2500	China	Water buffalo domesticated

dependent on humans for reproduction. Maize, native to the Americas and what we call corn, is an example. The seeds, which are the kernels, no longer fall off by themselves, but have to be removed from the cob.

Salt: "White Gold"

One of the most valuable trade items from earliest times was salt. It is not a condiment like pepper or mustard or ketchup, but a mineral, NaCl, sodium chloride. Humans need it to live. Our nervous systems can't function without it. Its prevalence shows in the many phrases connected with salt: a valuable person is the "salt of the earth," which is how Christ referred to his apostles; a useless person is "not worth his salt." One of the oldest ways of obtaining salt was by boiling or evaporating sea water. This was done in ancient Egypt; in ancient Gaul (the Romans' name for France); in France in the eighteenth century, to avoid paying the salt tax; and in India in the twentieth century as a way to gain independence from England and the British salt monopoly. This is a very expensive and labor-intensive way to get salt compared to mining rock salt.

Currently in the United States, between two and three million tons of salt are mined each year from a mine that runs under the center of the United States, from Detroit and Cleveland south to Louisiana. This salt mountain is as big as Mt. Everest, the tallest mountain on earth. Only four percent of the salt that is mined is consumed; the other ninety-six percent is used to de-ice roads and by the chemical industry, which breaks it down into sodium and chloride. America also has the Great Salt Desert in Utah, and the Bonneville Salt Flats, where cars are test raced.

Fermented Beverages: Mead, Wine, Ale

Mead—fermented honey—was probably the first fermented drink, perhaps another food accident. Maybe honey was left out, rain fell, yeast settled on the mixture. In both Greece and Rome, before winemaking, mead was offered to the gods.[25] Honey was a mysterious substance to ancient people. Greeks knew bees were connected to it, but not exactly how. Romans thought honey fell from heaven and landed on leaves, "the saliva of the stars."[26] Honey is produced from the nectar in flowers gathered by bees to feed young bees. Most of the water in the nectar evaporates, resulting in honey, which is thirty-five to forty percent fructose, thirty to thirty-five percent dextrose, seventeen to twenty percent water, and small amounts of enzymes, etc.[27]

Humans also started drinking wine very early. Maybe winemaking was done deliberately. Or perhaps wine was another culinary coincidence: grapes left at room temperature fermented naturally. Maybe crushed grapes and their juice left in the bottom of an animal skin fermented. Animal skins are all right for short-term transport of wine, but

they aren't an efficient way to store it. Pottery is, and by about 6000 B.C. clay jugs were being used. A clay jug with a narrow mouth can be stoppered up to prevent the oxidation that will turn wine to vinegar, while animal pouches can't. It is from the wine residue, tartaric acid, in these clay vessels that we know how long ago humans were drinking wine.

From the beginning, wine was an upper-class drink. Beer was the beverage of the masses, and it, too, might have been the result of an accident. The housewives who were responsible for food preparation malted their grain—they let it sprout because it tasted better and it was easier to mill and bake into bread. Somehow, the malted grain fermented into an alcoholic beverage and began to be produced on its own, and women became the brewers.

The early human settlements were small villages, extended family groups organized like a tribe or clan of 200 to 300 people, with an elder male as the final authority in disputes. Perhaps he was also a sort of spiritual leader or medicine man. Nothing was written, no laws were needed, because everyone was in agreement about what was right and wrong, and everyone was engaged primarily in the same occupation—procuring and preparing food. People who had special skills like weaving, carving, or making baskets or pottery, would have done it *after* their duties connected to food were done. But that changed as the advantages of farming and domestication became apparent. The settlements became larger, the land was irrigated with complicated systems of canals that required organization and cooperation, and governments arose.

Advanced Civilization: Cooking Becomes Cuisine

An *advanced* civilization has all the elements that our civilizations have now: cities with thousands of people doing specialized labor, advanced technology, structure and institutions like government, and a way to keep records. These advanced civilizations were possible because there was a surplus of food, so not everyone had to farm all the time. Specialized labor became possible—like artisans, priests, warriors, chefs, teachers, and government officials to keep records of the population so they could collect taxes and raise an army. Advanced civilizations are where cooking for survival changes to cuisine—cooking with awareness, for a purpose other than just to make food edible.

Some historians think that cities were started for the purpose of worship. Could one feeble voice raised in prayer reach the gods? Thousands would have a better chance of being heard. For whatever reason they began, cities became centers of trade.

Humans need fresh water to survive, so it is not surprising that the earliest civilizations began around rivers: the Tigris and Euphrates in southwest Asia, the Nile in Egypt, the Yellow (Huang He) in China, and the Indus in India.[28]

THE FERTILE CRESCENT: THE TIGRIS AND EUPHRATES RIVERS

The Fertile Crescent is an area of land that runs from the Mediterranean Sea on its western end, then curves around in a crescent shape to the Tigris and Euphrates rivers in modern Iraq, down to the Persian Gulf. It was in this part of the world, the land called Mesopotamia, which means "between the rivers," that scientists believe an advanced civilization began approximately 5,000 years ago—around 3000 B.C.

The cities in Mesopotamia were surrounded by walls for defense, and inside the walled city was another walled mini-city, the temple. Inside the temple was the most important building, the granary, where the city stored its food. Priests and priestesses honored the gods full time by preparing food for them and celebrating with feasts on their special days. So, from the earliest civilizations, food, religion, and government were connected.

As thousands of unrelated humans came to live together in cities, they needed organization. A leader named Hammurabi became known as "the law giver." The Code of Hammurabi consisted of laws governing every aspect of life in Mesopotamia: the management of the irrigation canals; marriage, divorce, adoption; and construction. The punishment in many cases was literally "an eye for an eye" or a broken bone for a broken bone. Punishments were worse for committing crimes against the state than against other citizens. For example, the fine for stealing a sheep, pig, or ox from a temple was triple the fine for stealing from another citizen. The Code also governed the wine trade and taverns. Tavern owners, usually women, had to report any talk they heard about plots to overthrow the government. And they were warned about serving watered-down wine. The punishment fit the crime—death by drowning.[29]

We know this because writing was invented in Mesopotamia, too. It was called cuneiform, which means "wedge-shaped," after the symbols that were pressed onto blocks of wet clay with an instrument called a stylus. After the clay hardened, the symbols became permanent records. Writing gives historians more information than just corpses, middens, and coprolites. Some of the written sources for information about food are recipes, correspondence, songs, poems and other literature, laws, business records, and household lists from temples, palaces, and the homes of the wealthy.

Cuneiform went out of use in the first century B.C., and over the next several hundred years the tablets disappeared. In the 1840s, British archaeologists discovered 30,000 tablets and pieces of tablets.[30] Among them they discovered the world's first recipe for ale.[31] Sumerians brewed "eight barley beers, eight emmer beers, and three mixed beers."[32] Hops were not added until almost 4,000 years later in the Middle Ages in Europe. Today in the Sudan, a beer called *buza* is still brewed in this ancient way without hops.[33]

"Let the gods eat roasted meat, roasted meat, roasted meat!"[34]

The abundance of food in Mesopotamia is evident in the records of what was presented to the gods and goddesses, who needed to eat four times a day. Their mainstay was bread, as it was for humans. The main god, Anu, and three main goddesses, Antu, Ishtar, and Nanaya, got thirty loaves a day—each. They also got "top quality dates," figs, and grapes.[35] There was also much meat given every day to them and to other minor divinities, about ten total, at the four meals:

> 21 top-grade sheep, fattened and without flaw, fed on barley for two years; 4 specially raised sheep, fed on milk; 25 second-grade sheep not fed on milk; 2 large steers; 1 milk-fed calf; 8 lambs; 30 . . . birds; 20 turtledoves (?); 3 mash-fed geese; 5 ducks fed on flour mash; 2 second-grade ducks; 4 dormice; 3 ostrich eggs and 3 duck eggs.[36]

This was sacred food, ritually prepared. The millers, bakers, and butchers had to recite prayers of thanks to the gods and goddesses as they ground the grain, kneaded the bread, and slaughtered the animals. Then the priests placed the food on golden platters and set it before the gods, perhaps on a table. Historians don't know what happened then, but speculate that the priests ate the food themselves or sold it if the temple needed money.[37]

In addition to lists like these for religious purposes, we have forty recipes from Mesopotamia, from three different sources. They are typical of the way recipes were written until about 400 years ago: ingredients without amounts, and only a hint at technique. For example: "Meat is used. Prepare water; add fat [], milk (?), cypress(?) as desired, and mashed leek and garlic. It is ready to serve."[38] The brackets indicate that the translator cannot understand the words; the question marks indicate that the translator is not sure. One set of recipes is for twenty-five broths made with venison, gazelle, kid, lamb, ram, spleen, pigeon, mutton, and "meat" not further identified. There is one for turnip broth. The aromatics are usually onion, leek, garlic, and sometimes mint; the spices are cumin and coriander, which might be sprinkled on top just before serving. Sometimes the soup is strained, sometimes crumbs or flour are thickeners. Another set of recipes is more elaborate, giving instructions on how to slaughter various birds for religious ceremonies. One recipe is for small birds, cooked in a fatty aromatic broth, served en croûte. The birds are washed in cold water before they are put in the kettle, and again after they are heated in the broth, just as modern cooks skim the scum.[39]

In Mesopotamia, foods were preserved by drying, salting, covering them in oil, or in the case of dairy, by turning it into clarified butter and cheese. Ingredients mentioned in other sources are pomegranates, arugula, fish, pistachios, cherries, plums, lentils, anise seed, grasshop-

pers, eggplant, jujubes (a kind of date), vetch (a legume), honey, turtles, sesame seeds, and pork. They did not eat horses, dogs, or snakes.[40]

Such culinary creations call for great skill, so cooks were a highly regarded professional class who served apprenticeships to learn their trade. They were specialized, with cooks separate from bakers and pastry cooks. Their services were affordable only to the wealthy. A royal household might have 400 cooks and 400 pastry chefs.[41] The gods mirrored this: a major god like Marduk might have a minor god, who would be known as "Cook of Marduk."[42]

How Humans Eat Together

By the first millennium B.C., Mesopotamians were giving elaborate banquets to display the power and wealth of the government. One was a ten-day feast to celebrate the building of the king's palace:

> . . . *69*,574 guests were invited . . . Dozens of items were served in enormous quantities: 1,000 plump oxen, 14,000 sheep, 1,000 lambs, several hundred deer of various kinds, 20,000 pigeons as well as other birds, 10,000 fish, 1,000 jerboa [a rodent], 10,000 eggs, plus thousands of jugs of beer and skins full of wine.[43]

Oil was also used at banquets, but not in the food—it was perfumed and used in the guests' hair.[44]

In contrast to these public spectacles with vast amounts of food, people in Mesopotamia, like people everywhere, had ceremonies that were more modest and personal.



Holiday History



KISPU

Kispu was a memorial meal that took place once a month on the last day of the Mesopotamian lunar calendar, during the dark of the moon. It was observed by all members of a family, living and dead. Kispu—from the word meaning "to break in pieces and distribute"—reinforced two important Mesopotamian beliefs: that your family was always with you, even after death, and that just because people were dead didn't mean they didn't need to eat. They just didn't need to eat as much. It also reinforced the wider family of the community, because the king also observed *Kispu*. He honored the dead of his dynasty, the rulers before him, and all those who had died fighting for their country. Even the gods celebrated *Kispu,* proof that breaking bread transcends time.[45]

Inventions That Aid in Trade: Wheel, Plow, Sail

Three extremely important inventions came out of Mesopotamia: the wheel, the plow, and the sailboat. The wheel and the plow were possible because of the availability of animal labor. Wheeled carts pulled by oxen or horses could transport more goods to market more quickly. They also made waging war with chariots possible. Animals pulling plows to turn the earth over for planting were far more efficient than humans. The sail made it possible to trade with countries that could be reached only by sea, or could be reached more quickly by sea, like India. All three inventions made the cities of Mesopotamia powerful trading centers with as many as 30,000 people each.

The wheel was put to use for one special food. A special breed of sheep produced especially delicious fat in its four-and-a-half-foot-long tail. But the tail was heavy and dragged on the ground, so humans made a little wheeled cart so the sheep could carry its tail around. Tail fat from this sheep is still highly prized today.[46]

Even after thousands of years of domestication and farming, of the tens of thousands of edible plant species on earth, only about 600 are raised for food now. Many were first grown in the Fertile Crescent. Now, because the Tigris and Euphrates rivers have been dammed, only about ten percent of the fertile Mesopotamian marshlands still survive. The other ninety percent is now desert.[47]

EGYPT: THE NILE RIVER

The Nile is the longest river in the world, its headwaters 4,160 miles upstream from where it empties into the Mediterranean Sea. The Nile was the giver of life for the ancient Egyptians. Water to drink and fish like carp, mullet, and sturgeon came from it. Every spring it overflowed its banks, bringing rich, fertile soil down from the mountains into the valley to grow food. There were three seasons in Egypt, all connected to the Nile and to planting: flooding was from the middle of June to the middle of October, when the floodwaters receded; sowing and growing lasted until the end of February; and harvesting continued until mid-June or July when the cycle began all over again. Humans scattered barley and wheat seeds by hand, then sent goats into the fields to walk on them and push them down into the soil so birds couldn't eat them before they had a chance to germinate. By 1300 B.C., apple orchards were planted along the Nile.[48] Like the Mesopotamians, Egyptians irrigated. However, sometimes the water stagnated and became hospitable to mosquitoes and other flies. Other vermin like mice and rats were also a problem because they chewed or burrowed their way into the granaries. Cats were domesticated in Egypt and worshiped because they kept the rodent population down.

One ancient food still eaten in Egypt is beans: "Beans have satisfied even the Pharoahs."[49] Most popular were and are fava beans–*ful nabed,* and brown beans–*ful medames,* the national dish of Egypt.

INGREDIENTS:

Egyptian Ful Medames[50]

2 pounds *ful medames,* soaked overnight
2 to 4 cloves garlic, crushed
6 *hamine* eggs (simmered in water with onion skins for at least 6 hours)
finely chopped parsley
olive oil
quartered lemons
salt and pepper

Ancient Egyptian culture revolved around a cycle of death and rebirth connected to the Nile. Many of the Egyptian gods and goddesses were related to death, but Osiris, who had triumphed over death, was also the god of resurrection and good. Egyptians believed that if they led good and orderly lives, they would be united with Osiris after death. On judgment day, when their hearts were weighed to see if they were heavy with sin, Egyptians made a "negative confession" to prove they had not violated the laws, many of which dealt with food and farming:

I have not mistreated cattle.
I have not cut down on the food or income in the temples.
I have not taken the loaves of the blessed dead.
I have not taken milk from the mouths of children.
I have not built a dam against running water.[51]

The pharaoh was equated with the Nile as the giver of life. The people expected the pharaoh, like the river, to reappear after his death. To rule properly in the afterlife, he would need two things: an impressive tomb—a pyramid—and his body.

The Embalmers—Cinnamon and Salt

The Egyptians salted human bodies to preserve them so the spirit would be able to find its home again after death. First the brain was removed

by drawing it out through the nose. Then the torso was cut open and the bowels and internal organs were removed. The cavity was stuffed with pungent-smelling spices like myrrh and cinnamon, then sewed back up. The corpse was submerged in a mineral salt called natron ($Na_2CO_310H_2O$) for seventy days. Then the salt was washed off and the body was wrapped in bandages. Now it was a mummy.

Mummification was done by the high priests, who had their heads shaved to be pure. Before the invention of insecticides in the twentieth century, shaving was the only way to guarantee that the servants of the gods would not have lice that could spread to the pharaoh. As a result of embalming, the priests knew a great deal about human anatomy. They used this knowledge to set bones; they also performed the first known brain surgery around 2500 B.C. They treated wounds with honey and moldy bread. This makes medical sense: the high sugar content of the honey draws moisture out of the cells, killing any bacteria,[52] and penicillin comes from mold, which was discovered by British scientist Dr. Alexander Fleming in 1928.[53]

The Book of the Dead: Food in the Afterlife

The great pyramids were built during a period known as the Old Kingdom, which lasted from 2686 B.C. to 2181 B.C. The pyramids were packed with everything a king would need to live and rule properly in the afterlife, including his wife and servants, who were killed when he died. This custom worked to protect the pharaoh from assassination by those close to him; they knew that if the pharaoh died, they died, too. Sometimes even pets were mummified. Foodstuffs found in pyramids include butter and cheese. Artwork and artifacts in pyramids reveal that the pharaohs ate well: a variety of meats, fish, dairy, fruits, vegetables, ostrich eggs, pastries.[54] Even beer making is depicted on pyramid walls.

Fermented Food: Bread

If the Nile was the giver of life, then bread *was* life. In ancient Egyptian, the word for bread was the same as the word for life.[55] In the beginning, bread was simple: grain and water patted into a flat circle with the hands, laid on a hot rock next to the fire to cook. Later, more elaborate shapes were made. As far as food historians know, Egypt produced the first leavened bread, perhaps by accident. One theory is that yeast landed on some dough left out; another is that ale was mixed with the flour instead of water. In any case, the gluten in the flour went to work and the bread puffed up—still an awe-inspiring event. A piece of the fermented dough from the previous batch could be kept to guarantee that the next loaf would rise, and sourdough was born. Or you could just take the

head off the beer or what was left in the bottom of the container after brewing, and add it to the flour. New technologies developed around leavened bread, such as closed ovens and molds shaped like triangles and long loaves. Commercial bakeries produced at least forty different kinds of bread and pastries.[56] Commercial bakeries were necessary to provide for feasts the pharaohs gave:

> 10,000 biscuits . . . 1,200 Asiatic loaves, 100 baskets of dried meat, 300 cuts of meat . . . 250 handfuls of beef offal, 10 plucked geese, 40 cooked ducks, 70 sheep, 12 kinds of fish, fat quails, summer pigeons, 60 measures of milk, 90 measures of cream, 30 jars of carob seeds . . . 100 heads of lettuce, 50 bunches of ordinary grapes and 1,000 bunches of oasis grapes, 300 strings of figs, 50 jars of honeycomb, 50 jars of cucumbers, and 50 small baskets of leek bulbs.[57]

These foods were eaten with the hands. In early Egypt, upper-class diners reclined on mats or cushions on the floor in front of low tables, but over the years, chairs and standard height tables came into use. Servants brought the food. The wealthy had a separate room just for cooking, instead of doing it on the roof or in the back of the building. But there was a vast underclass that had completely different eating habits.

Pyramid Builder Food: The Jewish Diet

One of the earliest types of human relationships was slavery. In ancient societies, slavery was based on being in the wrong place at the wrong time: if you lost a war, you became the property of the winners. So the Jews became the slaves of the Egyptians. The Jews were the first people to believe in one god. This type of belief—monotheism—made their religion portable. Their one god was not connected to a particular place, but was everywhere, unlike the many gods in polytheistic religions which were attached to sacred groves or rivers or mountains. For example, many of the gods of the ancient Egyptians were connected to the Nile, so worshiping them anywhere else would have been impossible.

The Jews have many dietary laws. One of the most important is kosher butchering. The purpose is to inflict as little pain as possible on the animal, one of god's living creatures. The animal is hung upside down, then its throat is cut quickly with an extremely sharp blade. This has benefits for the animal and for humans. It is humane because the animal loses consciousness quickly and doesn't suffer. The advantage to humans is that gravity drains the blood away, so the butcher can easily see any tissue that is white, which means it is toxic to humans. Any animal that is not killed in this ritual religious fashion, for instance if it dies from disease or an accident, is considered impure—*treyf* (trafe)—

and is forbidden. The koshering process continues in the kitchen, where the meat must be soaked, salted, and rinsed to remove all traces of blood.[58] The words *kosher* and *treyf* crossed over into English to refer to things that had nothing to do with food. For example, a person or deal that is *kosher* is above board, honest, decent. *Treyf* is trash.

Other Jewish dietary laws prohibit eating the flesh of four-legged animals that don't ruminate—that is, chew their cud—or which have cloven hooves. Chief among these is the pig. Also forbidden: rodents, reptiles, and fish that do not swim or have scales—shellfish. Jews must not "boil the kid in the milk of its mother," which prohibits eating meat and dairy foods at the same meal or even within several hours of each other. Orthodox Jews must wait six hours after eating meat to have milk.[59] They also keep kosher kitchens so that meat and dairy never touch each other. The kosher kitchen has two preparation tables, two sets of pots and dishes kept in separate cabinets, and two sets of cooking and eating utensils. Traditionally, red dishes are for meat; blue are for dairy. Some modern kosher kitchens have separate sinks and dishwashers.

There is a large third class of foods, neither meat nor dairy, that is safe to eat with anything. These are called *parveh* or *pareve*—neutral—and include plant foods like flour, fruits, vegetables, and sugar; salt; some beverages; and fish. However, there are some restrictions on these foods, too. For example, fruit must not be eaten until a tree has been bearing for at least three years.

While the Jews were enslaved, Moses went to Pharaoh and told him that god had said, "Let my people go, that they may hold a feast to me in the wilderness." But Pharaoh wouldn't let the Jews go. They prayed to their god for freedom; he answered with a series of plagues that were intended to starve and hurt the Egyptians while saving the Hebrews. The plagues turned the Nile to blood so that the water wasn't drinkable and the fish died; covered the land with frogs that got into the ovens and the kneading bowls; filled the air with gnats and flies; killed the livestock of the Egyptians but let the Hebrews' animals live; covered humans and beasts with sores; caused it to hail so hard that the plants and the trees died; sent swarms of locusts to eat what was left of the crops and fruit; and covered Egypt with a thick darkness for three days.[60] The final punishment was the worst: god would send the angel of death to kill the first-born son in every house unless people did as he commanded. Passover is one of the most sacred celebrations in Judaism.

According to the Old Testament, that is how the Jews finally gained their freedom. The leader in their Exodus from Egypt was Moses, who parted the Red Sea and led them to Canaan (although he was not allowed to enter), the "land of milk and honey," foods which represent a place of plenty.

Holiday History

PASSOVER

The Jews did as god commanded: they slaughtered a one-year-old lamb, dipped a bunch of the herb hyssop in the blood, and touched the doorposts and the lintel, the beam above the door, as a sign of where they were. Then they roasted the lamb and ate it with unleavened bread and bitter herbs. The angel of death saw the sign and passed over the houses of the Jews, but did take the first-born sons of the Egyptians and the first-born of their cattle. There was a great cry of grief throughout Egypt and Pharaoh finally let the Jews go.

God told the Jews when to celebrate Passover and what to eat. Passover begins in the "first month [of the lunar calendar], on the fourteenth day of the month at evening [and continues] until the twenty-first day of the month at evening." Ritual foods for the Passover dinner, called a seder, include harosset (also spelled haroset, charoset, or charoses), a mixture of chopped apples and nuts that symbolizes the bricks the Israelites were forced to make when they were building the pyramids; horseradish represents the bitterness of slavery; a hard-boiled egg dipped in salt water is the tears the slaves cried. Unleavened bread—matzo—is eaten for seven days because the Jews left Egypt so quickly that there was no time to take leavening.[61]

The Christian holiday of Easter is connected to Passover. (See Chapter 2.)

CHINA: THE YELLOW (HUANG HE) RIVER

China has some of the most dramatic geography on earth, and plant and animal life to match. In Tibet, on its western border, are the Himalayan mountains and the highest peak on earth. At almost 30,000 feet, Mt. Everest is nearly twice as high as the tallest peak in the lower forty-eight states, California's Mt. Whitney. China's lowest point, approximately 900 feet below sea level, is more than three times lower than California's Death Valley. China has climate extremes, too, from tropical rain forest to permanent ice caps. It has no Mediterranean climate, but drenching monsoon rains followed by drought. It also has an enormous population: by A.D. 2, sixty million people.[62]

Historians believe that agriculture arose independently in China and Mesopotamia, because the Chinese cultivated millet, a grain that was unknown in the Middle East, at approximately the same time that wheat was domesticated in the Middle East. The earliest Chinese civilization, from approximately 6000 B.C., was the village of Ban Po in the floodplain of the Yellow or Huang He River in north central China. The village's defense was not a wall, but a moat. The people lived in huts with

plaster walls and thatched roofs made of straw. Pigs and dogs were raised. Communal grain—millet—was buried in hundreds of pits scattered in the village. In 2005, archaeologists made an astounding find: millet noodles, perfectly preserved. This brought up the old rivalry between China and Italy over who invented noodles first. This "contest" began with the writings of Marco Polo (see Chapter 3), but each country still claims that it was making noodles first. The Italian response is that these are noodles, but they're not pasta, which is made from wheat.

At around the same time in northern China, salt was harvested when lake waters dried up during the summer. Salt production, either by harvesting or evaporation, predates what is usually used as a source of salt in China—soy sauce. Salt production dates from almost 2000 B.C., soy from around 1300 B.C. Soy sauce began as fish fermented in salt. Then soy beans were added, and finally, the fish was omitted, leaving just soy beans and salt. Soy beans are extremely nutritious legumes: they nourish the humans who eat them and the soil in which they are planted.[63] Cinnamon, too, is one of the earliest spices known in China. It is mentioned in China's first herbal book, in 2700 B.C.[64]

Chinese New Year is one of the oldest festivals observed anywhere. Around 2600 B.C., the Emperor Huang Ti began keeping records based on a lunar month and the twelve signs of the Chinese zodiac. Just as we have Sagittarius, Capricorn, and Scorpio, the Chinese have the Rat, the Tiger, the Rabbit, and other animals.

Some Asian cultures celebrate New Year when China does. But around the world, New Year's festivals are celebrated at many different times of the year, in many different ways. For some, it is a religious ceremony and a time of cleansing. For others, it is a time for partying.

The Chinese philosopher known to the west as Confucius (551–479 B.C.) declared that everything on earth would run smoothly if subjects respected rulers, younger brothers respected older brothers, wives respected husbands, and friends respected friends. He also supposedly assembled the *I Ching*, the Book of Changes, and the Book of Songs, a combination of court and peasant songs that reveals much about the cuisine and culture of the time. It mentions forty-four vegetables and herbs, including bamboo; Chinese cabbage and celery; peaches, plums, and apricots; pine and hazel nuts. Confucianism was the basis for government in China for many centuries. In the fifteenth century A.D., the Confucian scholars who ruled China made the decision that China would not trade with the rest of the world, which eventually proved damaging to China.

The Wall That Salt Built

In 221 B.C., Shi Huangdi, which means "first emperor," decided to build the Great Wall to protect China from attacks by the Mongols to the

Holiday History

CHINESE NEW YEAR

The Chinese New Year celebration is called "Spring Festival" and is deeply connected to China's ancient farming culture and to the moon. It begins at the new moon closest to the beginning of spring, usually the second new moon after the winter solstice. It always falls between January 21 and February 21, and lasts fifteen days.[65]

New Year's Eve dinner is a feast of traditional foods that are supposed to bring good luck and prosperity in the coming year. Each region has its own specialties. Near the sea, it might be prawns, dried oysters (*ho xi*), raw fish salad (*yu sheng*), angel-hair seaweed (*fai-hai*), and "sleep together and have sons"—dumplings boiled in water (*jiaozi*).[66] In the south, rice in pudding and wrapped in leaves are favorite foods, while in the north, it's steamed dumplings made of wheat. A whole animal represents abundance, but fresh bean curd is avoided because it is white, the color of death. And don't cut your noodles—long noodles mean long life.

The Festival of Lanterns is the last night of Chinese New Year, when lights and firecrackers drive away demons and promise a good year ahead. New Year's Day is when *Hong Bao* (Red Packet) takes place. Presents and money wrapped in red paper—the color of good luck—are exchanged, along with greetings to relatives and neighbors.[67] Our year 2006 is 4703 in China. *Gong Hai Fat Choy!*

Chinese Years:

2007 Year of the Pig	2010 Year of the Tiger
2008 Year of the Rat	2011 Year of the Rabbit
2009 Year of the Ox	

north. It was an expensive project, paid for with taxes from the state monopoly on salt—the first such monopoly in history.[68] The wall, twenty-five feet high and thousands of miles long, was built by more than one million men. It is one of only a few man-made structures on earth that can be seen from space. Like the pharaohs before him or the Roman emperors after him, Shi Huangdi began other massive public works projects including a palace that held 40,000 people. Convinced that he was such a great emperor that he would rule China even after his death, he had 6,000 life-size warriors and horses and 1,400 chariots sculpted out of clay and put in his tomb. Shi Huangdi also standardized written Chinese, which helped to unify China. However, taxed beyond endurance, and with a shortage of crops because farmers were working on the emperor's grandiose projects, the empire collapsed.

CROSSING CULTURES: NEW YEAR CELEBRATIONS			
Country/ Religion	**Name**	**Day**	**How Celebrated**
African-American	New Year's Day	January 1	Hoppin' John (red beans and rice)
Cambodia	Chaul Chnam Thmey	April 12, 13, or 14	House cleaning, visiting Buddhist monasteries
Denmark	New Year's Eve	December 31	Boiled cod with mustard sauce
Greece	New Year's Day	January 1	Pass out *Vasilopita* (St. Basil's sweet bread w/lucky coin inside) in church
India/Hindu	Diwali	October or November	Victory of good over evil; fireworks, oil lamps
Iran	Nowruz	Spring Equinox	Purification with bonfires and spring cleaning; fish and herbed rice
Ancient Ireland	Samhain	October 31/ November 1	(now Halloween) Bonfires, bobbing for symbolic magic apples
Italy	Capo d'Anno	December 31	Fireworks, lentils, sparkling wine
Japan	Shogatsu	January 1–3	Cleansing to start new, view sunrise, soba (buckwheat noodles = long life)
Judaism	Rosh Hashanah	162 days after first day of Passover	Holy day; cleansing; sweet foods
Korea	Sol-nal	January 1	rice cake soup—*ttokkuk*
Russia	Novyi God	January 1	roast goose or chicken; sweet cookies, vodka
Thailand	Songkrahn	April 13	Cleansing with water
U.S.	New Year's Eve/ New Year's Day	December 31 / January 1	Party and drink/ watch football
Vietnam	Tet Nguyen Dan	Lunar (Chinese)	Red envelopes with money; fireworks

INDIA: THE INDUS RIVER

Like the civilizations in Mesopotamia, Egypt, and China, early civilizations in India were centered around a river, the Indus, in the western part of the country. Because of its location at the junction of Asia and the Middle East, India has been the site of a great deal of cultural exchange through many overlapping migrations. The first of these occurred approximately 65,000 years ago. Then, around 6000 B.C., people from the Middle East migrated east into India, bringing domesticated cattle, sheep, goats, and their experience growing wheat. Other people migrated west from China, bringing rice and later, tea. By 750 B.C., Indo-Europeans had come south into India from the flat, dry grasslands called the steppes. They contributed the horse and their knowledge of iron. Other Indo-European-speaking people migrated into eastern Europe. Today, most of the languages spoken in Europe, India, Iran, and North and South America are based on this common Indo-European parent language. In math, India gave the world the zero and the decimal system.

Some important food firsts came from India: the first plowed field in the world, before 2800 B.C., and the chicken.[69] The technology for turning sugar cane into granulated sugar existed at least as early as 800 B.C. in India; the word "sugar" comes from India, *sharkar*. Many words for food come from ancient Indo-European or other Indian languages, even though the food might have originated somewhere else. The words for a rice dish with spices and meat—pilaf, *pilav*, or *pulao* in Persian and Arabic—come from the much earlier Indian *pallāo* or *pulāo*. English words for rice (*arisi*), pepper (*pippali*), mango (*mānggā*), orange (*nāgarangā*), curry (*kari*), and chutney all originated in India. Tamarind means "fruit of India" in Arabic.[70] Pulses consumed were peas, chickpeas, and lentils. Fruits included coconuts, pomegranates, dates, lemons, some melons, and possibly bananas.[71] In the beginning, India was not a heavily vegetarian country. The sacred cow came later (see below).

Hinduism

India gave the world two major religions, Hinduism and Buddhism. Hinduism arose some time between 750 B.C. and 550 B.C. after Aryans (people "of noble birth") arrived from the north. Its body of sacred literature, derived from oral traditions, is called the *Vedas,* but unlike the other great religions of the world, no one person was the founder. The Vedas describe methods of healing based on nutrition. This system of healing, called Ayurvedic medicine—Sanskrit for "the knowledge of life or daily living"—is still in use today.[72] It balances the body by using food types based on heat, cold, moist, and dry. Certain foods are healing for certain body types but damaging for others. The Vedas mention barley, but not wheat or rice, sugar, distilled liquor, grinding stones, and the mor-

tar and pestle.[73] They also gave instructions on how to carve beef for the priests who ate it at feasts. Ayurvedic medicine influenced Tibetan medicine and some aspects of Chinese medicine.

One of the fundamental beliefs of Hinduism is a rigid caste or class system that determines everything about a person's life, including what and with whom he can eat. There was a racial component to the caste system: those at the top were Aryans, more likely to be wealthy and educated, while those at the bottom were darker-skinned, poorer non-Aryans. The highest caste is the brahmins, who are often also the priests. Lower down are warriors, then peasants. At the bottom are the untouchables, manual laborers and people in trades the Hindus considered necessary but less desirable or "unclean," like butcher and garbage collector. The "untouchable" was meant literally; the slightest physical contact with an untouchable *or even his shadow* would contaminate a brahmin physically and spiritually so much that he would have to undergo ritual purification. One of the means of purification involved ghee, clarified butter. By heating butter to remove the milk solids—the part that would cause butter to become rancid—the butter could be preserved for a long time, even in the hot climate of India. Hindus cannot change the caste they were born into during their life on earth. They can, however, move up in the next life. Through a series of reincarnations (rebirths), they can work out bad karma—past wrongs—and eventually achieve divine peace, one of the four goals of Hinduism. The other goals are wealth and power, responsibility, and physical pleasure, which is celebrated in temple carvings of many people having sex in a great variety of ways. The caste system persists today in India in thousands of complex social relationships that determine everything about daily life.

In ancient India, one drink, soma, was sacred to the priests, who used it in their offerings to the gods, particularly the goddess of the moon, who gave her name to the drink. This was a controlled substance, far beyond mere alcohol. All-powerful, it produced superhuman feelings and supposedly healed all diseases. It was made by grinding the plant, then "The ground mass was collected on a cowhide, strained through a cloth of sheep's wool, and the sparkling tawny filtered liquid mixed for consumption with milk, curds or flour."[74] There are several candidates for the plant that could have produced these effects, but Indian food historian K. T. Achaya settles on the fly agaric mushroom, *Amanita muscaria*, a hallucinogen.

Buddhism

India's second great religion, Buddhism, arose in the fifth century B.C. Unlike Hinduism, it does have a founder, Siddhartha Gautama, known as the Buddha, who sought to understand the cause of suffering in the world. Fasting by eating only six grains of rice a day didn't help. Wandering didn't help. Finally, he sat under a fig tree and meditated for forty-nine days and reached the wisdom of enlightenment. Buddhism rejected

the caste system of Hinduism, so it appealed more to the lower classes. It also rejected the many gods of Hinduism but kept the belief in reincarnation as a way to change and achieve perfect peace without pain, which Buddhists call nirvana.The Buddha declared that the flesh of many animals, in addition to humans, should not be eaten: elephants, dogs, horses, hyenas, bears, and the big cats—lions, tigers, panthers. But he never said that cattle should not be eaten. That happened around 2,000 years ago, after an ecological disaster in India made it culturally suicidal to raise cattle for food, and long after the Buddha was dead.

Food Fable

THE SACRED COW

Many people outside of Asia think that people in India revere the cow for no reason. In India, cows are sacred because they produce oxen, castrated male cows, which are work animals. Oxen pull plows in the fields and carts on the roads. Their dung is fuel, fertilizer, and free. An Indian farmer who owns an ox can feed his family; if his ox dies, they might starve or be forced to move to the city. He can't borrow oxen from his farmer neighbors, because the cycle of heavy rain, then no rain means that all the fields have to be plowed at the same time. The zebu cattle native to India survived because they were able to adapt to these rain-drought cycles. They have humps like camels where they store water and food, and they are resistant to tropical diseases. Cattle are so important to the economy that when India became an independent nation after World War II, it wrote a bill of rights for cattle into its constitution.[75] In India's neighbor, Tibet, its native cow—the yak—performs the same functions today as the cow in India: labor in the fields, transportation, fuel, and manure.[76]

In the ancient worlds of Africa, the Middle East, the Indian subcontinent, and Asia, as humans evolved, so did human interaction. Over millions of years, humans had become bipedal; developed bigger brains; made tools and weapons out of stone, then bronze, then iron; progressed from herbivores to carnivores then omnivores; mastered fire and learned to cook; invented dance, language, art, and religion; domesticated hundreds of species of plants and animals; and created complex systems of irrigation, government, and law. In the first millennium B.C., as merchants from all of these areas traveled the trade routes, so did their cuisines and cultures. The knowledge of winemaking from the Near East, sheep and goat herding from the Fertile Crescent, olive oil from Egypt, and spices from India, especially black pepper, extended farther west and north than they had before, along the Mediterranean Sea, to another continent—Europe. All of these cuisines and cultures converged on a small, new country that would lay the foundations for western civilization—Greece.

753 BC 509 BC



404 BC 27 BC 180 AD 476 AD

Second Course

Grain, Grape, Olive: ANCIENT GREECE AND IMPERIAL ROME

THE MEDITERRANEAN SEA

The Mediterranean Sea was the center of cuisine and culture for the Greeks and Romans. The word *Mediterranean* means middle (medi) of the earth (terra), and the sea connected the earth of three continents: Europe to the north, Africa to the south, and Asia to the east. To the west was the Atlantic Ocean and the unknown, so to ancient people, the lands surrounding the Mediterranean were the known world. The Mediterranean climate is subtropical, with dry, sunny summers and mild wet winters. This type of climate is found between thirty and forty degrees north and south latitude: central and southern California, South Africa, central Chile, and southwestern Australia.

The ancient cuisine of the Mediterranean was based on the trinity of bread, wine, and olive oil. These were not just the basic foods of everyday life; they were also sacred. The gods and goddesses who provided these foods were worshiped, and the foods themselves were the substance of religious ceremonies—both polytheistic Greek and Roman, and monotheistic Jewish and Christian ones.

GREECE

Geography

The geography of Greece strongly influenced its culture and cuisine. Greece is a rocky, mountainous country surrounded by the sea on three sides. Since only fifteen to twenty percent of the land was flat enough or fertile enough to farm, they couldn't grow enough grain to feed themselves. When a country is faced with this situation, it has three choices: (1) trade, (2) colonize, or (3) conquer. Greece did all three. It traded its staple crops, olive oil and wine. It founded colonies like Sicily to produce grain. But when it tried to conquer other territories, it was defeated and was conquered itself.

Geography affected government in Greece by keeping it small and local, because travel over steep peaks and down deep valleys was difficult and time consuming. Each city was like a small country and ruled itself. It is from the Greek word for these city-states—*polis*—that we get our word *politics*. The city-state of Athens was the birthplace of democracy, the form of government in which the citizens rule by voting. The United States and all other democracies are based on this. However, Greece was no political paradise: only free males were allowed to be citizens and to vote. Women had no say in the government and neither did much of the labor force, which was slaves.

The Greeks were a nation of sailors who lived on the abundant variety the sea provided: fish like mullet, turbot, grouper, sea bream; and eels, octopus, and squid. The measure of an ancient Greek cook was what he could do with fish.[1] The first chef we know by name in history was a Greek man named Mithekos, from the city-state of Syracuse, in Sicily. His book of recipes—ingredients and instructions—mostly for fish, has disappeared. We know about it only because mention of it survives in other writings.

Especially popular was the dark-fleshed bluefin tuna, *Thunnus thynnus,* native to the Mediterranean. These large fish—they can weigh almost a ton—were preserved in salt or olive oil, as they still are today in the Mediterranean. Bonito, the bluefin's ten-pound relative, was wrapped in fig leaves and slow-cooked in the ashes.

Food, too, was democratic in Greece, at least until the fifth century B.C. Everyone ate the same modest meals based on olives and figs, goats and sheep, barley pounded into a paste, porridge, or unleavened bread. More than any other food, bread represented civilization because it was a completely human product, controlled by humans every step of the way. Vinegar was a favorite ingredient of the Greeks. Black pepper was also used, but was considered a medicine. Cows were not kept because of the shortage of pasture land, so a man who owned oxen was considered rich.[2] However, he didn't kill them because he needed them to plow his fields and for transportation. Goats and sheep were kept, but the young ones were reserved for ritual blood sacrifices to the gods. It was a matter of economics, too:

Culinary Confusion

TUNA

Americans are most familiar with white-fleshed tuna, known as albacore (*alba* means "white" in Latin), also known as "chicken of the sea." This is really the longfin tuna, scientific name *Thunnus alalunga* (*ala* = fin, *lunga* = long), which is found in the Atlantic and Pacific oceans, but not in the Mediterranean. However, what the French call albacore is the red-fleshed yellowfin, scientific name *Thunnus albacares*. This tuna is not found in the Mediterranean either, but is found in tropical and subtropical waters, and is prized by Japanese sushi and sashimi chefs, who call it yellowtail. In Hawaii, it is known as ahi, and in Spanish it is rabil.

goats and sheep produced milk to drink and to make into cheese, and mohair and wool, so they were only killed when they were very old and had outlived all their other purposes. The Greek diet was also heavy in sweets. They ate fruit, which the philosopher Aristotle observed caused their teeth to rot: "Why do figs, which are soft and sweet, damage the teeth?"[3]

That was the diet in Athens, in northern Greece. In the southern part of Greece, Sparta was a rigid militaristic society. Infants that were not born healthy and physically perfect were tossed off a cliff. Girls and boys ran and played rigorous sports to toughen them up. When they were seven years old, the boys were sent away for military training. They lived in barracks and slept on hard wooden benches. Spartan food matched the Spartan life. Although cheese, barley, and figs were food fundamentals in Sparta,[4] the staple food was a black broth made from pork stock, vinegar, and salt. It is from their denial of what they considered luxury that we get the word *spartan*.

Geography also influenced human relationships in Greece. Because the land made travel so difficult, the guest-host relationship was sacred. If a stranger, even a poor man, appeared at your door, it was your duty to be a good host, to take him in and shelter him, share your food and wine with him. "We do not sit at table only to eat, but to eat together," said the Greek author Plutarch.[5] Dining was a sign of the human community and differentiated men from beasts. In return, the guest had obligations to his host. These included not abusing his host's hospitality by staying too long, usually not more than three days. A violation of this relationship by either side brought justified human and divine wrath. An example is in Homer's epic poem, *The Odyssey*. After the Trojan War, which lasted ten years, Odysseus, King of Ithaca, wandered for another ten years trying to return to his home. In his absence, his house was

filled with men who drank his wine, ate his roasted meat, and pressured his wife to choose one of them as her new husband because they kept assuring her Odysseus was dead. When he finally arrived home disguised as a lowly swineherd, the suitors refused to give him food or shelter. Then Odysseus revealed himself and justifiably killed them all.

Demeter, Goddess of Grain: The "Good Goddess"

A powerful goddess was Demeter, the goddess of all growing things—mother earth. Barley was sprinkled around her temple as an offering to ensure that the earth would be fertile. As time passed, the barley was replaced by wheat, then rice. The custom of scattering rice spread from the temple to the wedding ceremony to guarantee fertility in marriage. This is why we still throw rice at the bride and groom. (Now, however, in an effort to be environmentally sensitive, many people sprinkle birdseed because birds can't digest rice.)

Demeter had a beautiful daughter named Persephone [per SEH fuh nee[6]] who she kept hidden from the roving eyes of the male gods. One day, the thing Demeter feared the most happened: Persephone let out a scream that shook heaven and earth and vanished. Demeter was devastated. She left Mt. Olympus and wandered the earth disguised as an ordinary human, looking for her daughter. She would not eat or drink the food of the gods, only the little bit of food the reapers ate: barley-water with mint; or water, meal, and pennyroyal.[7] Finally, the Sun told her that Hades, the god of the dark kingdom of the dead, had seen Persephone picking flowers and thought she was so beautiful that he opened the earth and captured her. Demeter grieved when she heard this, and so did the earth. Everything stopped growing. Zeus finally stepped in and negotiated a compromise because all the humans were going to starve. Persephone could be with her mother, but only part of the time. She had eaten a pomegranate seed that Hades had given her, which meant that she had to return to the underworld to be with him. That is how Persephone came to be both the goddess of springtime and of the dead. During Persephone's eight months aboveground, joyous Demeter lets things grow and flourish. But when Persephone is in the world of the dead for four months every year, Demeter mourns and nothing grows.

And that is where winter comes from.

Dionysus: God of the Grape

Each winter in Greece, grape vines seemed to die, only to be miraculously reborn in the springtime. Just as the Nile represented resurrection to the Egyptians, Dionysus, the god of the vine, was the sacred symbol of resurrection and immortality to the Greeks. Grapes were plentiful; wine production began by 1500 B.C.[8] The Greeks drank it sweetened with honey, because the amphoras—the ceramic vessels they used to store wine—were

waterproofed with resin, a sticky secretion from trees that tasted like turpentine, also a resin. The taste persists today in the Greek alcohol retsina. Like the wine he represented, Dionysus had many sides: he could lift men out of their ordinary state of mind and inspire them, but men also sometimes committed terrible acts under his influence. Women were rarely allowed to have wine. For instance, public banquets were usually restricted to men. On the rare occasions when women were invited, they didn't get the good, strong, aged wine the men got. They were served "sweet wine or barely fermented grape juice."[9] Drinking wine was regarded as sacred because it altered human consciousness and brought men closer to god. At one of the most sacred Greek ceremonies, it was not consumed with dinner as a beverage, but after, at what the Greeks called a symposium.

The Symposium

The symposium was an elaborate ceremony that usually took place in a ruler's dining hall or public building, often a temple. By the seventh century B.C. it was an accustomed practice. The best sources from ancient Greece are paintings on vases; the best current source is Massimo Vetta's essay, "The Culture of the Symposium."[10] As Vetta states, the symposium was "a meeting of men that only took place following a meal" to consecrate a special public or private event like a wedding or to thank the gods for a victory in games or to make a political decision.[11] It began with a blood sacrifice—a religious offering to the gods of an animal, usually a young lamb or goat, that had been ritually killed. "The slaughter of animals in sacrifice and the butchering of the meat was the task of the *mageiros* (the Greek word for chef, butcher, and sacrificer of animals): he divided the meat between the worshippers."[12] After the gods got the best portion—thigh meat and fat—the humans ate. Slaves served the guests, who took their sandals off and reclined on couches propped up on one arm. When the eating was over, tables were cleared, hands were washed, floors cleansed of the scraps thrown on them during dinner. The men were given garlands to put on their heads and chests. Then poetry was recited, flutes played, decisions made. The sense of community was further reinforced because all the men drank from the same cup.[13] Except for a few drops of sacred wine at the beginning of the ceremony, the wine was diluted, often at the ratio of one part wine to two or three parts water. The Greeks regarded diluted wine as a symbol of civilization. It also helped to avoid drunkenness.

Athena: Goddess of the Olive

There was gold in Greece—olive oil. Olives, the fruit of the *Olea europaea* tree, had been cultivated and pressed for their oil in the eastern Mediterranean by Palestinians and Syrians since about 5000 B.C. The dusty gray-green trees are slow growing but live to be hundreds of years old. Prized

Food Fable

THE ANCIENT GREEK WAY TO DRINK AND NOT GET DRUNK

The ancient Greeks loved wine and were always searching for ways to drink without getting drunk. They finally came up with what they thought was the antidote to the downside of Dionysus: drinking purple wine from a purple vessel made of semi-precious stone would cause the two purples to cancel each other out and negate whatever was in the wine that caused drunkenness. In Greek, the prefix *a* means "not," *methyein* means "drunk" (from *methy*—wine), so the Greek word for "not drunk" became the name of the purple stone the vessel was made out of—*amethyst*.[14]

for cooking, as medicine, and as fuel, olive oil was one of the basics of trade in the ancient Mediterranean. It was also used as a body lotion sometimes scented with perfume. For example, in the Olympics, which began in 776 B.C., naked men greased with olive oil competed in the earliest sports: running, the long jump, the discus and javelin throws, wrestling, boxing, and a combination of five events called the pentathlon—all still part of the modern Olympics, which began in 1896. (The winner wasn't totally naked: he was crowned with a wreath of laurel leaves from the god Apollo's sacred tree.) When it was discovered that olive trees, which are very sensitive to cold, grew well in Greece's mild climate, they became a staple crop. However, their deep roots let the topsoil wash away, finishing off the erosion that had begun centuries earlier when the Greeks started chopping down trees to build houses and ships.

Unripe green olives and even ripe black ones are bitter. Before they can be eaten they must be cured in brine, in oil, in water, or dried in salt. If they are going to be crushed to extract the oil, it must be done very carefully with just the right amount of pressure to force the oil out of the olive, but not smash the pit into it. In ancient times:

> The olives were first crushed in basins. The resulting mash was then transferred to straw baskets for the actual pressing to be done. Several baskets were stacked in a press. Various methods of producing a graduated pressure were developed over the early centuries, chiefly a long, extremely heavy beam counterpoised with weights. The crushed fruit yielded a liquid comprised of water and oil. It had to be allowed to settle before oil could be skimmed off at successive intervals.[15]

Ancient people didn't have the levels of labeling that came into existence at the end of the twentieth century, but "virgin" means first press-

ing; "extra virgin" means less than one percent acidity; "cold-pressed" means that heat, which would alter the chemical composition and taste of the oil, was not used.[16]

The olive tree is highly symbolic in Western culture. Jews and Christians know it from the Old Testament story of Noah's Ark and the flood. When the dove that Noah sent out to see if the world was still flooded flew back to the ark with an olive branch in its mouth, everyone knew that the floodwaters had receded and that there was peace again. The dove and the olive branch have symbolized peace ever since. To the Greeks, the olive was the symbol of the goddess Athena, who created it. She was the warrior goddess, helmeted and carrying a shield, who also represented peace and wisdom. She protected Athens—the city named after her—and helped the Greeks win the Trojan War in Homer's epic poem *The Iliad*.

Olive Chronology[17]

??	Olive trees perhaps domesticated in Iran and Turkestan
3500 B.C.	Olive trees cultivated in islands near Greece and Turkey
15th c. B.C.	Phoenician traders bring olive trees to Cyprus and Crete
8th c. B.C.	Greek colonists take olive trees to Sicily, southern France, Spain, Thrace, Black Sea area
8th c. B.C.	Ekron (modern Israel) produced more than 1,000 tons of olive oil/year
ca. 175 B.C.	Rome—Cato writes *On Farming*, much of it about olives and oil
A.D. 2nd c.	Rome—Columella writes about difficulty of harvesting olives
1497	Olive trees from Spain arrive in Caribbean and Mexico
ca. 1775	"Mission Olive" trees planted at Spanish missions in California
1803	First record of olive oil pressed in California
1899	Ripe—not green—olives canned
1933	California man invents mechanical olive pitter; martini fans rejoice[18]
21st century	European Union, especially Spain (Andalusian region) and Italy, produces three-fourths of world's olive oil

Nectar and Ambrosia: Food of the Gods

To the Greeks, the stories about the gods were their religion. Christian writers who came later called them myths. There were twelve major Greek gods, called the Olympians because they lived on Mt. Olympus. They were immortal and ate mysterious food that was forbidden to humans—the sweet drink, nectar, and heavenly food, ambrosia (not to be confused with the twentieth-century fruit salad made with orange sections, sliced bananas, and shredded coconut in an orange juice and confectioners' sugar sauce).

Even though the gods did not eat human food, they were very human in their behavior. They fought among themselves, lied, cheated on their spouses, got angry, and were not above disguising themselves to get what they wanted, frequently a beautiful young girl. The husband-and-wife team of Zeus and Hera headed up the gods. Both a goddess and a god were connected to fire. Hestia, the goddess of the hearth, the only sister of Zeus, and a virgin, was worshiped in public and in private every day because every city had a sacred fire that was kept burning constantly. In this case, the goddess paralleled what the humans did, since the daughter of the household was responsible for keeping the fire going. Hestia also received offerings at the beginning and end of every meal. One of the rituals of founding a new colony was to take fire from the old city to the new one to guarantee continuity. It survives today in the ceremony of the Olympic torch, which has to be carried by hand from Athens to the site of the Olympic games every four years.

The god connected with fire was Hephaestus. Like many Greek gods, he had both a positive and a negative side. On the positive side, he was a blacksmith, which showed the power of fire to create and be useful to mankind. The negative was that he also represented the power of fire to destroy, because he lived in a volcano (his Latin name is Vulcan). In another typically Greek contrast, Hephaestus, the only god who was ugly and deformed, was married to beautiful Aphrodite, the goddess of love. She gave her name to foods and other substances that are thought to stimulate the senses or improve performance sexually—aphrodisiacs. Some foods that are considered aphrodisiacs now are oysters, caviar, Champagne, chocolate, and snails.

Food played a large part in Greek mythology, too. Hunger was used as a punishment for the crime of cannibalism. Tantalus, the only mortal who had ever dined with the gods on nectar and ambrosia, invited the gods to a banquet at which he served a peculiar dish. He had killed his son, boiled him, and now was feeding him to the gods. They figured it out before they started eating (except for one bite of his shoulder) and gave Tantalus a punishment to fit his crime—eternal agonizing hunger and thirst. He was forced to stand in a pool of water, but every time he bent down to take a drink, it disappeared. He reached up to pluck the ripe apples, pomegranates, pears, and figs dangling just over his head, but the wind blew the branches out of his reach. It is from Tantalus that we get our word *tantalize*—to drive somebody crazy with desire.

The Golden Age of Greece and the Professional Chef

In the fifth century B.C., Athens and Sparta allied and defeated the Persian Empire in a series of wars. The peacetime that followed was the Golden Age of Greece. Athens grew to between 300,000 and 500,000 people and created the buildings, paintings, and sculptures that are the hallmarks of Greece and Western civilization, like the Parthenon, a hilltop temple with

a forty-foot statue of Athena. The Golden Age was the great age of theater in Greece, the comedies of Aristophanes and the tragedies of Aeschylus, Sophocles, and Euripides that are still performed today.

The Golden Age was also the beginning of a wealthy class and a split in the culture between rich and poor, which was reflected in Greek cuisine. The poor continued to subsist on barley heated up to remove the chaff and ground into cakes called *maza*, wheat pastes or unleavened bread, some sheep or goat cheese, and olive oil.[19] The wealthy had more elaborate meals, with more variety in diet. They consumed legumes like chickpeas, lentils, and vetch, and seeds from flax, sesame, and poppies. They also ate the meat of domesticated animals, including dogs, after observing sacrificial rituals. The forests provided large and small game: boar, deer, hare, and fox. The vegetables commonly eaten were turnips, leeks, watercress, onions, garlic, and purslane.[20] The new profession of bee-keeping made honey more available.[21]

The rise in urbanization, wealth, and trade produced a need for more than the free guest-host hospitality of earlier times. City-run inns provided professional hospitality for traveling merchants and businessmen throughout the Greek world, often in waterfront areas.[22] All of these people needed food; cooking became a profession in Greece. In addition to being able to afford chefs, the wealthy could afford to buy imported wines. They also drank much more wine than the poor. Cuisine was not as elaborate as it later became in Rome, but some of the chefs became known. One, Archestratus, from Sicily—either Syracuse or Gela—wrote much about food but it wasn't a cookbook. He wrote food poetry, parodies that made fun of the epic poems like *The Iliad* or *The Odyssey*, that were recited—sung to a lyre, a kind of harp—as entertainment at a symposium. Guests expecting a song about heroic deeds must have been surprised when instead they got verses about fish. Only fragments survive, partly because Greek philosophers like Plato didn't think cooking was an art, or food writing was worth preserving in libraries.

Greece's Golden Age ended when it went to war with Sparta. Starting in 431 B.C., Athens and Sparta waged a twenty-seven year war for control of the Greek peninsula. Much of Sparta's strategy was to cut Athens off from its food supply. Knowing this, Athens tried to invade Sicily in 415 B.C. to turn it into a grain-producing colony. Two disastrous years later, the Sicilians emerged victorious after destroying Athens's navy and one-third of its total military force.[23] The war finally ended in 404 B.C. when Sparta blocked Athens's sea route to its grain supply. Without food, Athens was forced to surrender. The Golden Age of Greek civilization was over.

Alexander the Great and the Magic Golden Apples

A new conqueror appeared, from Macedonia, just north of Greece. Alexander was not Greek but he loved Greek culture. His tutor was the

philosopher Aristotle, who had been the student of Plato, who had been the student of Socrates. Alexander's goal was to conquer the known world, and he did. His empire stretched east from Greece through Persia (modern-day Iran) and Iraq to the Indus River on the western border of India, north through what are now Afghanistan and Pakistan, and south into Africa. His conquering created a new culture, Hellenistic, that was a combination of four cultures: Greek, Persian, Indian, and Egyptian. This had an impact on the cuisine of Greece, because new methods of food preparation and new foods were introduced. One writer bemoaned all the changes that were occurring with food: "Do you see what things have come to? Bread, garlic, cheese, *maza*—those are healthy foods, but not these salted fish, these lamb chops sprinkled with spices, these sweet confections, and these corrupting pot roasts. And by Zeus, if they aren't simmering cabbage in olive oil and eating it with pureed peas!"[24]

Alexander established cities everywhere he conquered and named at least fifteen after himself. The center of learning in the world shifted from Athens to Alexandria, Egypt. It had a library with 700,000 volumes of Greek writing, a zoo, a botanical garden, an observatory, and a great lighthouse more than 400 feet high to keep the ships safe, many of them carrying wheat from the Nile River valley to feed the Mediterranean world.

Alexander was on a quest for immortality—the legendary Water of Life or the magic Golden Apples. He didn't find either one, but he did find other apples that were supposed to let him live to be 400 years old.[25] He didn't live to be forty. He died of a fever, maybe malaria, one month short of his thirty-third birthday. Still seeking immortality, he arranged to have himself preserved in honey and placed in a glass coffin in Alexandria, Egypt. After his death in 323 B.C., as usual after the death of a powerful leader, there were wars of succession and his empire was split up into smaller areas ruled by several generals. But Alexander's vast empire would soon appear small. Power in the Mediterranean was shifting to a fast-rising country located west of Greece on a peninsula shaped like a boot—Italy.

THE ROMAN EMPIRE

The Founding of Rome, 753 B.C.: Suckled by a Wolf

Every country has myths about its founders. In the United States, these myths are about honesty. As a boy, George Washington supposedly chopped down a cherry tree and "couldn't tell a lie" when his father asked him about it. Abraham Lincoln's nickname was "Honest Abe." The myth of the founding of Rome is that Romulus and Remus, twin boys, were born under an olive tree, which symbolized that they were



The Capitoline Wolf. *Photo © Leo C. Curran*

descended from a god—in this case, Mars, the god of war—and a Latin princess. They were abandoned at birth, but a she-wolf saved them by nursing them. When they grew up, Romulus murdered Remus and founded the city of Rome.[26] What we know for sure is that Rome was founded in the eighth century B.C. on seven hills, twenty miles up the Tiber River for defense—all the better to see invaders' ships coming. There was also a natural harbor there. Salt deposits along the banks and at the mouth of the Tiber provided a valuable item to trade.[27] One of the first roads in Rome was the Via Salaria—the Salt Road.

Roman Culture: Gods and Goddesses

Rome absorbed much of its culture from Greece, including the idea that the mind and the body were connected and affected each other—"a healthy mind in a healthy body" (*mens sana in corpore sano*). Greek slaves who were prized for their learning as tutors and their skill as cooks brought their customs and beliefs to Rome with them. Many of the Roman gods are Greek gods with name changes. Dionysus, the Greek god of wine, became Bacchus and gave his name to a wild, drunken feast, the bacchanalia. Jupiter and his wife Juno presided over the Roman gods just as Zeus and Hera presided over the Greek gods. Hestia became Vesta; Aphrodite became Venus. She still cheated on her hunchbacked husband, the blacksmith Vulcan who lived under Mt. Aetna in Sicily and

gave his name to our word for erupting mountains—*volcano*. The Roman goddess of the harvest, Ceres, counterpart of the Greeks' Demeter, gave her name to our word for grain—*cereal*.

The Grain Wars: The Punic Wars

From 264 to 146 B.C., Rome and the Phoenicians, whose capital city was Carthage in what is now Tunisia in northern Africa, were locked in a series of wars to the death for control of trade in the western Mediterranean, especially the grain fields of Sicily. To aid them in trade, the Phoenicians had invented a system of writing that is the basis of our alphabet. In the second of these wars, called the Punic Wars, a Carthaginian general named Hannibal made one of the boldest moves in military history. Instead of sailing across the Mediterranean and attacking Italy from the south, which they expected, he marched thousands of soldiers and sixty elephants over the Alps and attacked Italy from the north, taking them by surprise. For more than ten years, Hannibal's soldiers and elephant(s) (historians think that perhaps all the elephants died except one) ate their way up and down the Italian peninsula, through fields of wheat and barley, through orchards of apples, pears, and lemons, and through the vineyards. They devastated the country's farms and economy, especially the rich agricultural areas of northern Italy, so badly that the damage to the fields could not be repaired for many years. Rome eventually won by attacking the city of Carthage, but fifty years later when it looked like Carthage might make a comeback, Rome finished the Phoenicians off. After a three-year siege, Carthage was burned and razed. The 50,000 Carthaginians who were not killed outright were sold into slavery. Then the ground was spread with salt so that nothing would ever grow there again.[28] Rome now controlled the western Mediterranean Sea. *Mediterranean* means "middle of the land" in Latin, but after Rome gained control of the eastern part of the sea, too, they called it simply *mare nostrum*—"our sea."

Hannibal had long-lasting effects on the Roman economy. Small farmers couldn't afford to replant or repair the damage. They also couldn't afford to compete with the slave labor on the *latifundia*, the large plantations. So they sold their farms to the wealthy landowners and then either roamed the countryside looking for work as laborers or moved to the cities where they were poor or homeless. Soon, one-third of the population of Rome was slaves and another one-quarter was poor.

The Roman Republic

Rome began as a monarchy but by the third century B.C. it was a republic with a three-part government: 300 senators made the laws and served for life; two co-consuls commanded the army and administered

the laws; and a court system. Almost 2,000 years later, the Founding Fathers of the United States, fluent in Latin and familiar with the history of Rome, patterned parts of the American government on the Roman Republic and used Rome to justify slavery. The young United States even referred to itself as a republic. We still use Latin words for legal terminology and government positions: *governor*, *senator*.

The Roman Republic ended when Julius Caesar gained too much power as a general, defied the senate's order to disband his army, and proclaimed himself dictator for life. The senators agreed that he could be dictator for life, then stabbed him to death in the senate in 44 B.C., on March 15, which the Romans called the Ides (EYE dz) of March. This plunged the country into seventeen years of civil wars during which Roman general Marc Antony and his ally, Cleopatra, the queen of Egypt, committed suicide after they lost a decisive naval battle to Octavian, Julius Caesar's grandnephew and adopted son.

The Roman Empire

In 27 B.C., Octavian emerged victorious as Rome's sole ruler and first emperor with the title of Augustus—"majestic." The reign of Augustus initiated 213 years of the *Pax Romana*—"Roman Peace"—for the simple reason that Rome had no enemies left to defeat and no one to stop its expansion. The empire Augustus controlled sprawled across three continents. In Europe, it reached north through Gaul (present-day France) to the island of Britannia (England) and its most important city, Londinium; and west to present-day Spain, Portugal, and the Atlantic Ocean. In Asia to the east, it extended into Armenia, Syria, Judaea, and Arabia. It also controlled grain-rich north Africa, the breadbasket of the empire, Egypt's rich Nile Valley, and modern-day Libya, Morocco, and Tunisia. Tunisia was the source of most of the olive oil for the Roman Empire. Olive oil was so important to the Roman economy that planting enough olive trees excused a farmer from military service. Through trade with countries outside the empire, Romans now had access to exotic foods and spices, animals, fabrics, and people.

Trade Routes: The Silk Road and Cinnamon Land

Much of Rome's trade with other countries centered around spices. These were acquired over the Silk Road to China and the sea routes from India and Africa. The Silk Road was not a paved road like the other Roman roads, but a series of caravans that traveled through deserts and over mountains to the end of the road—the international marketplace in the capital city of Chang'an in northeastern China where traders of all races from many countries came to buy and sell. What the Romans wanted most, in addition to spices like ginger, turmeric, and galangal,

was silk. They prized it and liked to wear it to banquets, where they protected it with large aprons. However, the Romans could only buy silk, not produce it, because silk production was a Chinese monopoly and a closely guarded state secret. Silk was literally worth its weight in gold.

By sea from India and Africa to warehouses in the Spice Quarter in Rome came spices for cooking, for perfume and incense, and for medicine. Cinnamon was the most valuable. It was one of several spices, including white pepper, ginger, and cardamom, that were extremely expensive not only because of the shipping costs, but because a twenty-five percent tariff—an import tax—was added. The nobles, frequent targets of poisoning, often by their relatives, believed that if you combined almost every spice known to mankind, it would make an antidote that could counteract even the most powerful poison. Cinnamon was also used to mask the "smell of burning flesh at special cremation ceremonies."[29] Black pepper was not on the list of luxury spices because the Romans considered it a necessity. Other luxury items subject to the tariff were silk, wool, and cotton; purple cloth (reserved for the upper class); lions, lionesses, leopards, panthers; and jewels—diamonds, emeralds, pearls, turquoise.[30] In 301, the emperor Diocletian set maximum prices for many of these goods to try to stop the runaway inflation that was making them cost increasingly more while Roman money became increasingly worth less.

Arab traders had a monopoly on cinnamon and told the Romans fantastic stories to keep their sources secret. They claimed it grew in remote swamps, high up in trees, where killer bats swarmed. We know now that the Arabs got it from Indonesia, sailed to Madagascar and then to Somalia on the east coast of Africa, which was called Cinnamon Land. From there it went up the Red Sea, overland to the Nile, and across the Mediterranean.

The culture of Rome—its food, laws, customs, and language—spread on the roads with the governor, the army, and the merchants, and displaced existing cultures and foods. Rome dominated trade so completely that some countries, like the Kush area of northern India in what is now Afghanistan and Pakistan, were forced to develop metal money in order to do business with Rome. In the provinces, Romans replaced local kinds of apple trees with ones they preferred. As early as 200 B.C., the Romans planted apple orchards in Britannia.[31] Roman knowledge of gardening, grafting, and pruning spread, too. Italian wines reached into the provinces and replaced Greek wines, not just because the taste of Italian wines like Opimian and Falernian was preferred, but also because at 1,600 gallons per acre, Italian vineyards produced a volume that Greeks couldn't match.[32]

To glorify Rome, the emperors embarked on a massive campaign of public building based on the discovery of a new kind of sand—

Wine Chronology—Ancient		
When	Where	What
B.C. 8500–4000	Zagros Mts. (Iran)	Earliest traces of wine
4000	Persia (Iran)	Rose petal wine exported[33]
3150	Egypt	Wine jars in ruler's burial chamber
2750	Mesopotamia	First written mention of wine
2340	Mesopotamia	First written mention of wine cellar
1750	Mesopotamia	Code of Hammurabi regulates taverns
1330s	Egypt	Wine labeled with year of vintage, name of vineyard, and vintner in King Tut's tomb
1000	Mediterranean	Phoenicians trade wine, spread viticulture
5th c.	Greece	Greek wine found in France, Egypt, Black Sea, Danube
3rd c.	Greece	Thriving wine industry; export 10 million liters/year to Gaul[34]
ca. 200	Rome	First Latin writing about viticulture, *De Agri Cultura* by Cato[35]
AD 1st c.	Greece	Wooden barrels replace pottery amphoras
65	Spain	Columella writes down "principles of viticulture"[36]
92	Rome	Emperor Domitian decrees that no new vines can be planted; he is ignored
280	Rome	Domitian's law repealed

concrete—that made it possible to create stronger buildings using arches to distribute the weight. It was during this time that many of the greatest buildings of ancient Rome were built: the Forum; the Colosseum, which opened in A.D. 80; the Pantheon, temple of all the Roman gods; and the aqueducts that brought water into Rome. The Forum, four levels high, was the business, political, religious, and market center of Rome, like a giant mall. If all roads led to Rome, all roads in Rome led to the Forum. Spacious, open plazas were surrounded by multi-colored marble columns, and luxurious public baths and public toilets also made of marble. It contained markets for local and imported produce, restaurants that sold fast food, and small boutique-type stores that sold expensive imported spices and other luxury goods under armed guard. It was the location of religious festivals, sacrifices, and offerings of rare, scented oils and incense to the warrior god, Mars; and behind the temples, of dirty deals and prostitution. Government administrators and bureaucrats, the equivalent of the Internal Revenue Service and Social Security, also worked at the Forum.[37]

Upper-Class Cuisine and Culture: Banquets and the *Convivium*

For the ten percent of the Roman population who were the wealthy upper class—called patricians—breakfast and dinner were the main meals, eaten at home. Lunch was lighter, often bought from a street vendor. Breakfast was mostly leftover cheese, olives, and bread. Lunch was called *prandium* and might be followed by a visit to the public baths. Dinner was *cena* if it was only family; if there were guests and it was more elaborate with additional courses like appetizers and desserts, it was a *convivium*. Like the Greeks, the Romans believed strongly in the guest-host relationship. In Latin, the word for "guest" and the word for "host" are the same—*hospes* (pronounced HA-space). It is where we get our word *hospitality*.

But what time did Romans dine? The Romans divided the day into two parts, with the middle of the day, noon—*meridiem*—as the dividing line. Midday was important because Rome was a society of laws, and lawyers had to be in court before noon. The Romans called the part of the day before noon *ante-meridiem*, which we abbreviate "a.m."; *post-meridiem*, "p.m.," was after the middle of the day. They read the time on big sundials in their gardens or on one-and-one-half-inch portable, pocket-sized sundials. Neither worked on cloudy days. Water clocks, which measured the flow of water against lines drawn on a basin, served as a backup but were not portable, so people were much more casual about time. Roman dinner would have been in the late afternoon or early evening. Depending on how elaborate the *convivium* was, it could last all night.

Since the dining room was where entertaining took place, it was the best room in the house. It was called the triclinium, after the couch on which three people could recline while they ate. The dining room was elaborately decorated with paintings on the walls or a mosaic tile floor that might have pictures of food, like fish and baskets of grain. Romans ignored the religious rituals that the Greeks had observed regarding meat and wine. They didn't make ritual blood sacrifices before eating meat—usually pork, their favorite. They also didn't ritually purify the dining room after eating and before drinking wine because they didn't wait until the end of the meal to drink. They drank wine with their meal, a custom that is still observed in Italy today. At the end of the meal, which was prepared and served by slaves, guests might be offered silver toothpicks.

When the weather was good, wealthy Romans dined outside—*al fresco*. Dining in one of these elaborate sunken or terraced gardens could be just as elegant as dining indoors. They might have ornamental flower gardens as well as food gardens, with separate landscape designers for

each. Care was taken to grow special plants for bees—usually rosemary, thyme, and roses.[38] Urns, statues, sundials, shrines, and altars decorated the gardens. Grapevines trained on an arbor or nets that kept birds in provided shade. Water pumped in from the aqueducts splashed in fountains, mosaic-lined pools, and ponds stocked with fish and ducks. The outdoor triclinium was built-in, made of marble, cement, or stone, with soft pillows on top. A ledge built into the couch served as a cup-holder so wine was within easy reach. Sometimes the couches were built around a small pool so the food could float on trays, cooled by the water. Or dinner guests might climb up into a tower and enjoy the view; take a siesta on a sleeping couch in a small outdoor room after the meal; or have dinner in a tree house.[39]

Some wealthy Romans got out of the city altogether. Like wealthy people today, Romans had vacation houses at the seashore, on a lake, or in the mountains. Their villas (Latin for "farmhouse") were often within twenty miles of Rome so they could visit them easily and oversee their farms. Vacation villas were built for relaxation and to take advantage of the views. Pliny the Younger, a Roman author, had an estate with almost thirty rooms, including quarters for slaves. He called it "my little villa." Eating and entertaining took place in two dining rooms and a banquet room. The main dining room had windows and doors that looked out over the sea on three sides. Glass was very expensive so windows were usually made of mica or were just holes cut in the walls and closed with shutters. The other dining room and the banquet room were in two separate towers. The second dining room, with eastern and western exposure, faced a vineyard and a garden planted with rosemary bushes, and fig and mulberry trees. The banquet room had ocean vistas. Pliny was keenly aware of which windows got breezes and sun from which direction, at what time of day, and in which seasons. There was also an herb garden on the grounds, grain storage, and aboveground wine storage purposely placed near the furnace because the Romans thought smoke helped the wine age. The villa had built-in bookcases, a bathing room with two tubs, and a separate room next to it for applying bath oil. In addition, there were three public bath houses in the small town. State-of-the-art heating in the villa was provided by hot air generated in the furnace room and circulated into the rest of the house through pipes under the floor.[40]

The food had to be outstanding to match such stunning surroundings. Underlying much of Roman cooking was a pungent fermented fish sauce called garum, a unique combination of salt, sea, and sun. It originated in Greece and was perhaps the ancestor, in a roundabout way, of Worcestershire sauce. The theory is that Romans exported garum to India in ancient times and then the British brought it back from India to England 2,000 years later. Garum was readily available commercially; here's a recipe:

RECIPES:

Garum or Liquamen

"Garum, also called liquamen, is made in this way. The entrails of fish are placed in a vat and salted. Also used are whole small fish, especially smelts, or tiny mullets, or small sprats, or anchovies, or whatever small fish are available. Salt the whole mixture and place it in the sun. After it has aged in the heat, the garum is extracted in the following manner. A long, thickly woven basket is placed in the vat full of the above-mentioned fish. The garum enters the basket, and the so-called liquamen is thus strained through the basket and retrieved. The remaining sediment is allec.

"The Bithynians make garum in the following manner. They use sprats, large or small, which are the best to use if available. If sprats are not available, they use anchovies, or lizard fish or mackerel, or even old allec, or a mixture of all of these. They put this in a trough which is usually used for kneading dough. They add two Italian sextarii [approximately one quart] of salt to each modius [one peck, a quarter of a bushel] of fish and stir well so that the fish and salt are thoroughly mixed. They let the mixture sit for one night and then transfer it to a clay vat which is placed uncovered in the sun for two or three months, stirring it occasionally with sticks. Then they bottle, seal, and store it. Some people also pour two sextarii of old wine into each sextarius of fish."[41]

To compare: good quality garum cost twice as much as vinegar, the same as lower grade aged wine, and less than half of what top-quality honey or fresh olive oil cost. Approximately one pint of garum cost the same as one pound of pork, lamb, goat, or second-quality fish, and twice as much as a pound of beef. The expensive meats were chicken—one pound cost five times as much as one pint of garum—and goose, which cost more than sixteen times as much.[42]

Apicius and the First Cookbook

The first cookbook dates from the first century A.D. This compilation of recipes divided into ten books or chapters is only a fragment; baking and pastry are missing, which indicates that these were separate specialties. *De Re Coquinaria* (Cooking Matters) is attributed to a man named Apicius, which means "epicure" or "gourmet."

Food Fable

WHO WAS APICIUS?

Little is known about him. In fact, there are three men named Apicius who might be candidates. One was a high-living man-about-town who loved to eat well and had many dishes named after him, including cheesecakes. He spent a great deal of his wealth on food, endowed a cooking school, and supposedly killed himself when his fortune dropped below a level that could support his expensive habits.

The book was translated from Latin into Italian and German after the invention of the printing press in the fifteenth century, but an English translation didn't appear until 1936. Only 530 copies were printed because culinary history was in its infancy and there wasn't much interest in the subject. Translating the manuscript was a life-long dream and labor of love for Joseph Dommers Vehling, a world-class chef who grew up in a small town on the German-Dutch border and was trained and worked in the grand hotels of Europe before he became an executive chef planning menus for the railroads in the United States. Vehling loved food and cooking as well as the Latin language and Roman culture. A world traveler, he had visited the Roman ruins. In Pompeii, buried suddenly by a volcanic explosion in 79 A.D., he saw ancient bakeries, ovens, and flour mills; the olive oil, figs, lentils, and spices preserved in jugs and jars. Below are pictures of the ovens and the clay vessels—called amphoras (pronounced am FOR uhs)—still in Pompeii.

Vehling's goal was to set the record straight about the ancient Romans, "for our popular notions about their table are entirely erroneous and are in need of revision."[44] He felt that too many people believed fantastic stories about Roman banquets—which were rare—and satires like Petronius's *Satyricon* because these were the available sources. There is more historical information about banquets because educated, wealthy people wrote about them, whereas information about the customs of other classes is sparse. For example, 500 years from now culinary historians will be reading newspaper and magazine articles about what foods were served at the many celebrations of Julia Child's ninetieth birthday in the summer of 2002, but probably nothing about the dinner you had last night, which would reveal much more about how Americans really eat.



Pompeii—ovens. *Photo courtesy Nancy Uhrhammer*



Pompeii—amphoras. *Photo courtesy Nancy Uhrhammer*

From the recipes of Apicius it is clear that the Romans liked sauces and meat. Food historian Mireille Corbier states that the ten most common ingredients in Apicius's 468 recipes are black pepper, garum, olive oil, honey, lovage, vinegar, wine, cumin, rue, and coriander. Absent is garlic, the seasoning of the poor.[45] For the wealthy, a feast meant meat and meat meant pork: "nature made the pig for the banquet table."[46] Pigs were fattened and their livers enlarged in much the same way geese were prepared for foie gras until recently—force feeding. Pigs were fed dried figs, then guzzled mead. The liquid expanded the figs, which killed the pigs.[47] True omnivores, the Romans ate sow's udders, calf's brains, flamingo tongues, sheep heads, pork sweetbreads, capon kidneys. Vehling says that the capon—a castrated male bird—was supposedly "invented" by a Roman surgeon in response to a law that made it illegal to fatten hens. So he castrated a rooster, which caused it to fatten naturally.[48] Romans also raised the dormouse (*Glis glis*) commercially, plumping and tenderizing these small mammals by confining them in earthenware vessels that looked like flower pots with ventilation holes and feeding them a high-fat diet of walnuts, chestnuts, and acorns.[49] Rabbits and hares were also raised commercially. Dogs were eaten, too. Milk came from cows and camels. Cheeses, both domestic and imported, were eaten alone with bread or as an ingredient in other dishes.[50] Olive oil was the main fat; butter—salted—was introduced centuries later when the Germanic barbarians invaded.

Vinegar added tang in these recipes in combination with honey or garum, while raisin wine and honey were the sweeteners for many main dishes. Honey was also used to preserve fruit and meat. Oregano and mint appear frequently but historians are still speculating about silphium. Food historian Tannahill says the herb is completely unknown now; others think it might be laserwort,[51] the *fang feng* of Chinese medicine, used to treat sinus infections and fevers.[52] Some historians think silphium was used to extinction because it prevented pregnancy.[53] The use of spices in some of the recipes is eerily modern. A recipe for pears could have come out of California 2,000 years later: "Stew the pears, clean out the center, crush them with pepper, cumin, honey, raisin wine, broth and a little oil; mix with eggs, make a pie [custard] of this, sprinkle with pepper and serve."[54]

Apicius also included recipes for drinks, even floral wines. He gives recipes for rose wine, fake rose wine made with citrus leaves but without roses, and violet wine. But most recipes are based on sauces. For example, a fish sauce: " . . . tak[e] one ounce of pepper, one pint of reduced wine, one pint of spiced wine and two ounces of oil." In Roman cooking, a white sauce is made with white wine, white pepper, and egg yolks: "Put yolks of hard boiled eggs in the mortar with white pepper, nuts, honey, white wine and a little broth." Eggs were frequently used as a thickener or binder, along with bread crumbs, honey,

and animal blood. The blood could be either from an animal that had been killed, or from a living animal that had been bled. Favorite fruits included grapes, pomegranates, quinces, figs, mulberries, apples, and pears; and the stone fruits: plums, cherries, and peaches. Like a Roman Martha Stewart, Apicius even provided serving tips: "An expensive silver platter would enhance the appearance of this dish materially," he wrote at the end of a recipe composed of sow's belly and figpecker (a bird) breast seasoned with crushed pepper and lovage, sweetened with raisin wine, layered with thin pancakes, and topped with pine nuts.[55]

There are even some medicinal recipes, like one for spiced salts that can be used "against indigestion, to move the bowels, against all illness, against pestilence as well as for the prevention of colds." Apicius didn't need to include many medicinal recipes in his cookbook because a book explaining in detail the medicinal uses of 600 species of plants also appeared in the first century A.D. The *Materia Medica*, written by Dioscorides, was one of the major medical textbooks for over 1,000 years. The first century A.D. also produced Pliny's *Naturalis Historia*, which has several sections on the medicinal uses of plants and animals, even imaginary ones like dragons.

Lower-Class Cuisine and Culture: Street Food

The ninety percent of the population that made up the lower classes in Rome—the plebeians—lived in poorly built tenement apartments that collapsed or caught on fire. This was negligence, because the same culture built the Colosseum and the Pantheon, which are still standing. The tenements had no kitchens, so street vendors did a thriving business selling bread and grain pastes. Wheat was the mainstay of the poor. In 122 B.C., reformers lowered the price of grain so the poor could afford it; in 58 B.C., wheat became free to those who qualified. The wheat was usually prepared two ways: mashed and boiled into porridge, or ground and baked into bread.[56] Leavened and unleavened bread, bread with poppy seeds, with pepper, with salt, with cheese, with honey; square bread and round bread and flat bread and shaped bread could be produced on a massive scale because the Romans had the technology to produce flour on a massive scale. This required more than human labor—the donkey was harnessed to a grinding stone called a quern and walked around it in endless circles to separate the wheat from the chaff.[57] For a cold beverage, soldiers and the poor drank *posca,* vinegar diluted with water. *Calda* was wine diluted with hot water. They also had a kind of bread soup with vinegar and mashed cucumber, the forerunner of gazpacho. Indoors at the *taberna* (where we get our word *tavern*), patrons could drink wine and nibble on salted foods, chickpeas, or turnips,

the way popcorn and peanuts are served in American bars. The *popina* served simple dinners and alcohol. Both places provided gambling and prostitutes.[58]

In the country, a real villa, the house where the farmer lived and worked, was very different from the vacation villas of the rich. Under one roof were the living quarters for the farmer and his family, an underground prison for chained slaves, a kitchen with high ceilings so the beams didn't catch on fire, baths, a bakery, dining room, barn, stable, threshing room, and separate rooms for olive and wine presses, and wine fermentation. Again, great care was taken with direction: the grain storage should be open to the north, because north wind is the coldest and least humid, so the grain will stay dry and won't rot.[59]

A Day in the Life of the Roman Empire

	Patricians: 10% of the Population	Plebeians/Slaves/Farmers: 90% of the Population
You are	A wealthy landowner, in the military, or in the government. You pay for the spectacles at the Colosseum.	Poor or unemployed. You go to free public entertainment at the Colosseum or the Circus Maximus.
You live	In a many-room house with kitchen and dining room, built around a courtyard. You have other homes.	In one room with no kitchen in a poorly built tenement that catches on fire or collapses.
You wear	Imported silk.	Coarse homemade fabric tunic.
You eat	Pork, wine sweetened with honey, food with sauces like garum and expensive imported spices prepared by servants; in your home or at friends' villas.	Grain pastes, bread bought from street vendors or made from free government grain; skin from the fish that made the garum; in a *taberna* or *popina*.

The Persecution of the Christians: Life and Death in the Colosseum

During the *Pax Romana*, Rome didn't wage war against other countries. It did wage war internally, however, against Christians and Jews, who were considered atheists because they refused to worship Roman gods. They also threatened the power of the state because they were willing to die for their God, not for the state. Christianity was only one of the many religions that arose as a response to the excesses of luxury and cruelty among the upper classes in the Roman Empire. Romans persecuted Christians by, among other things, forcing them into to-the-death combat with other humans or animals in the Colosseum, an arena

that could hold up to 50,000 people. After some of the human-animal battles, the animals, like bears, were butchered and became upper-class suppers.[60]

In the Colosseum, completed in 80 A.D., the Circus Maximus (which means "Biggest Circle"), and other arenas, the Roman Empire could control its underclasses in three ways. Giving the urban poor free bread kept them from revolting because they were hungry. Giving them free entry to these torture-spectacles kept them in one place so they could be managed. It also released anger and was a serious warning about the power of the state. In effect, upper-class Romans were telling lower-class Romans, "Watch out, or you could end up down there, too."

The emperor Constantine ended the persecution of the Christians in A.D. 313 after he supposedly saw a cross in the sky as a good omen just before he won a battle. In A.D. 325, he convened the Council of Nicaea in Anatolia (modern-day Turkey), which made the cross the official symbol of Christianity and set the date for Easter at the first Sunday after the first full moon following the spring equinox.[61] This is why Easter can fall anywhere between March 22 and April 25.

Easter is preceded by Lent, a forty-day period of fasting (excluding Sundays) that begins on Ash Wednesday, which signifies mourning. The period before Ash Wednesday is one last celebration of partying and eating the rich foods like cheese, meat, and eggs that are restricted or forbidden during Lent. This is called Mardi Gras ("fat Tuesday") or Carnevale (literally, "good-bye meat"). (For more, see Chapter 7.) Lent made a virtue of fasting during a time of scarcity. At the end of winter there was little fresh food for humans or beasts; even dried or salted food was in short supply. Some monks supposedly survived the winter on a triple bock beer, very high in vitamins and carbohydrates.

In A.D. 380, the emperor Theodosius decreed that Christianity was the official religion of the Roman Empire.

The Persecution of the Jews: Masada and the Diaspora

The *Pax Romana* was not a time of peace for the Jews, either. The Romans killed hundreds of thousands of Jews, most in two separate battles. In A.D. 70, the Romans destroyed the Temple in Jerusalem, leaving only one wall, which is now a holy shrine, the Wailing Wall. In A.D. 132, the Jews decided to take the decision about how they would die away from the Romans: they killed themselves at the rock fortress cliffs of Masada rather than let the Romans kill or enslave them. The rest fled their homeland of Judaea for safety, scattered in the Diaspora. The Jews were without a homeland for almost 2,000 years, until 1948, when the

Holiday History

EASTER

Easter is a combination of Jewish, pagan, and Christian rituals. Its name comes from the Jewish Passover, *Pesach* in Hebrew. In Italian, it is *Pasqua*; in French, *Pâque*; in Spanish, *Pascua*; in Swedish, *Päsk;* in Russian, *Paskha.* In English, Easter gets its name from Eostre, the Old English goddess of fertility and dawn. Her festival was during the spring equinox as plants began to grow again and young animals like bunnies, lambs, and chicks were born. The Christian part of Easter is the story of the crucifixion and resurrection of Christ.

Lent ends with the Last Supper, on Holy Thursday, when it is believed that Christ gave the ceremony of communion to his followers, the twelve disciples, "Take of this bread and eat of it, for it is my body. Take of this wine and drink of it, for it is my blood." Then Christ was betrayed by one of the apostles, Judas, who sold him out to the Romans for thirty pieces of silver. The betrayal is portrayed in Leonardo da Vinci's fresco *The Last Supper* by Judas knocking over the salt cellar, a traditional sign of evil.[62] The next day, Good Friday, is the deepest day of mourning in the Christian religion because it is the day Christ was crucified (on a cross made of olive wood), died, and was buried. On Easter Sunday, Christians believe that Christ rose again and ascended into heaven.

Eggs were forbidden during Lent, but were used heavily in ritual foods when the fast was broken on Easter Sunday. They were in special egg breads like Ukrainian *paska* or Russian saffron-scented *kulich*. Sometimes the bread is decorated with dyed hard-boiled eggs or shaped into a cross. For Easter dinner, traditional foods depend on geography. In the Mediterranean, it is lamb; in Northern Europe, ham; in England, beef.

The custom of giving painted eggs for Easter dates to the later Middle Ages. Baskets to hold the eggs represent birds' nests. The Easter Bunny with his basket of painted eggs came to America with German immigrants in the nineteenth century. In Washington, D.C., children used the grounds of the Capitol Building as a playground and for egg hunts until Congress, unhappy with the torn-up lawn and tired of voting money to keep repairing it, passed a law against it. However, in 1878, children from Washington, D.C., went to President Rutherford B. Hayes and asked if they could have an Easter egg hunt. The president and his wife Lucy agreed to let the children use the White House grounds. Easter egg hunts have taken place on the south lawn of the White House ever since. It is the largest public event held at the White House, but it is only for children six years old and under. (See Chapter 10 for Ukrainian Easter eggs and Fabergé eggs, the jeweled eggs made for the Russian royal family.)

United Nations created the country of Israel in the old Jewish homeland, so that Jews all over the world could have a safe haven after the Holocaust of World War II. However, in those 2,000 years, Muslims had occupied the land and considered it their home. The conflict between Muslims and Jews continues to this day.

Bread and Circuses: The Decline of Rome After A.D. 180

The *Pax Romana* ended in A.D. 180 when wars with foreign countries resumed. These wars, diseases, loss of loyalty, and economic decline weakened the Roman Empire. The Plague of Antoninus, named after the reigning emperor, was new and terrifying, one of the first zoonoses—diseases that cross over from animals to humans. It began as a disease of cattle but in humans was called smallpox because of the small pus-filled sores that covered the skin. The fifteen-year epidemic that ended in A.D. 180 killed millions.[63] At one point, 5,000 people a day were dying in the city of Rome alone. Then another plague (some historians think it was measles) struck the empire. The high death tolls created vacancies in many jobs that were crucial to the running of the empire. It killed so many farmers that the empire's food supply was threatened. To remedy this, Rome offered land to people who were not citizens—even to barbarians—if they promised to farm it, then passed laws forcing people to farm and making farming hereditary.

There was also an unfavorable balance of trade. More money was going out of the empire to buy spices, silk, and animals for the contests in the Colosseum, the Circus Maximus, and other arenas than was coming in. By A.D. 250, there were 150 of these spectacles a year, almost one every other day,[64] and the government was giving oil, wine, and pork to 200,000 urban poor in addition to bread.[65] The free food and free admission to the entertainment kept the poor from being hungry and angry and made them grateful to the government instead. At the same time, as waves of epidemics hit Rome, Christians stayed with the sick while pagan Romans ran; grateful people converted to Christianity.[66]

In A.D. 330, the Emperor Constantine took a desperate measure to preserve the empire—he split it in half. He made the old city of Byzantium his new capital in the east and named it after himself, "Constantine *polis*"—Constantinople. The division strengthened the eastern half, which survived; the western didn't.

The Fall of Rome, A.D. 408–476: "The Funeral of the World"

The fifth century was a time of increasing chaos in the Western Roman Empire, which was cut off from the more powerful Eastern Empire. The

YOU JUST MIGHT BE A BARBARIAN IF . . .[67]
(with apologies to Jeff Foxworthy)

- you eat your meat raw
- you warm your raw meat by putting it between your thighs
- you warm your raw meat by putting it between your saddle and your horse
- you have never eaten bread
- you eat your food without sauce
- you drink ale because you think wine is for wimps

military was unable to defend the borders against barbarians—Visigoths, Ostrogoths, and Vandals, illiterate Germanic nomadic tribal people.

Finally, the once invincible Roman army couldn't even protect the city of Rome. In 408, invaders held it for ransom: 3,000 pounds of black pepper.[68] In 410, Visigoths ransacked Rome for three days. Wealthy Romans who had estates and villas outside the cities fled to them and buried their silver dinnerware—knives, spoons, cups, dishes, serving pieces—in the fields, where it was still being unearthed in the twentieth century. In 452, Attila and his army of Mongol nomads—Huns—appeared outside the city. The Emperor of Rome commanded no army and wielded no real power so Pope Leo I negotiated the peace with Attila. This was the beginning of the ascent of the Christian Church to its position as the most powerful political force in Europe in the Middle Ages.

The barbarian invasion became final in A.D. 476 when the German general Odoacer seized the throne from the last Roman emperor, fourteen-year-old Romulus Augustulus. The great Roman Empire was broken, its western half destroyed. Rome, the city a million people had called home, was almost a ghost town. Now its entire population—20,000—could fit in the Colosseum two and a half times. Nature took over, obliterating the signs of the great civilization. Wind and weather finished off what the barbarians had left of the architectural masterpieces that Rome built. The magnificent Forum, all the shops empty, offices gutted, temples untended, grew wild. Among fallen marble columns and through abandoned buildings where an empire once ruled the earth, down roads where great armies had marched, cows wandered and chewed weeds. Descent began into the decentralized, isolated, rural, illiterate life that would characterize western Europe for

centuries to come. With the breakdown of the Roman roads came the end of the western empire and the beginning of the end of the Latin language. Communication was cut off, trade expired. No more exotic animals or sexy fabrics or spicy foods. For nearly the next thousand years, almost everything in western Europe would be homegrown, homemade, and homespun.



Third Course

Crazy Bread, Coffee, and Courtly Manners: CHRISTENDOM, ISLAM, AND BYZANTIUM IN THE MIDDLE AGES, 500–1300

The Middle Ages is the time between the fall of the Western Roman Empire at the end of the fifth century, and the modern world, which began with the Renaissance in the fourteenth and fifteenth centuries. With the roads no longer safe, western Europe became isolated. Literacy and learning declined. Daily life centered around individual farm-based rural societies. Feudalism, a system based on loyalty to a local lord rather than to a distant king or to a country, determined a person's place in society. However, in the eastern half of the Roman Empire, the Byzantine Empire, with its capital in Constantinople, safeguarded Roman culture and laws, mixed with Greek culture. Eastern Christianity developed differently from Roman, too, and eventually clashed with it. Farther east, a new religion—Islam—propelled a great trading empire and created cities where goods and ideas flowed and new cuisines were invented. It was inevitable that these great empires would clash. In the eleventh and twelfth centuries, a series of crusades which were unsuccessful from a military and religious standpoint created new cities and re-opened trade routes.

CHRISTENDOM: THE EARLY MIDDLE AGES IN WESTERN EUROPE

The Early Middle Ages, the period from A.D. 476 to about A.D. 1000, was a time of chaos and attempts at political organization. The Christian church based in Rome and its leader, the bishop of Rome, called "father" in Italian—*il papa*, or the pope—emerged as the most powerful forces in European politics and daily life. The Church controlled every aspect of life in the Middle Ages in Europe, from Spain to eastern Poland, from Italy to England and Ireland. The Church told people what they could eat and when; when to fast and when to abstain. It had guidelines for when married couples should or should not have sex, how often, and in what positions. The Church even controlled time: the bells rang out, signaling to the illiterate when to get up, say morning prayers, go to Mass, say evening prayers, and go to bed.

After the invasions of the Goths in the fifth century, the Church worried that these beer-drinking barbarians would tear up the vineyards or destroy the wine presses or somehow drive wine—necessary to Christian worship—out of existence. But they didn't. Viticulture continued to flourish, maybe because the barbarians had found a use for wine that made sense to them—as armor. Linen saturated with a mixture of wine and salt dried hard as a board.[1] However, the Church's problem wasn't beer-drinking barbarians but wine-drunk priests and monks who made spectacles of themselves. Attempts to control them weren't very successful, even though public drunkenness was against the law.

Feudalism

Feudalism was a political, social, economic, military, and legal system based on local, personal relationships and loyalties. It was an extension of the class system that had existed in the Roman Empire, transferred to the countryside, where it preserved the unequal percentages of upper and lower classes—ten and ninety. Class divisions in food, clothing, education, and occupation were enforced by law. There was none of the upward mobility that is available to us in modern society through education, changing jobs, or starting over someplace else. People who wanted to be more attractive by decorating their clothes with fur trim or buttons, items reserved for the nobility, attracted the clothes police. Serfs endured this system because the Church told them it was God's will, their lot in life. And because there was nowhere else to go.

There were few cities, and those were small with only a few thousand people. Little travel or trade was done because the roads were unsafe and in disrepair, so the manors had to be self-sufficient. The lord of the manor provided land for the serfs to farm; in exchange, the serfs

would be the army when the lord needed one. The lord also provided bread. Unlike modern English, Old English, the language spoken in England from the middle of the fifth century until the end of the eleventh, divided its words into genders. *Hlaf*—"loaf," the staple of life—was a masculine word. "Lord" was *hlaford*—"loaf keeper"; "lady" was *hlaefdige*—"loaf kneader." A servant was a *hlaf-aeta*—"loaf eater."[2] The serfs had to pay a fee to use the lord's mill to grind their grain into flour and to use his oven to bake their bread. Sneaking off to do these things somewhere else resulted in a fine because on the medieval manor the lord was also the law.

A Day in the Life of the Middle Ages

	Nobles: 10% of the Population	Serfs: 90% of the Population
You live	In the manor house, the largest and tallest structure on the estate after the church.	In a small, one-room, leaky, thatched-roof hut with your family, your animals, their vermin, and your vermin.
You wear	Fur, velvet; cape, long tunic, buttons.	Homespun flax; short tunic and leggings (or the clothes police come).
You eat	Meat; fine-grained white bread for your delicate health; spices and foods from the Middle East: almonds, dates, sugar; *blancmange*; wine, beer, mead, cider.	Oat gruel; coarse, dark bread that might poison you with ergot; fruits, vegetables, pulses, cheese; beer, cider.
You do	Oversee the farming, collect taxes, administer the law. Anything requiring literacy.	Farm. Farm. Farm. Fight if your earthly or heavenly lord needs you to. You are illiterate.

The Medieval Mind: The Christian Diet and the Four Humors

The Great Chain of Being reflected the world view in the Middle Ages: everything and everybody had a place ordained by God. Off the scale at the top was God; at the bottom were inanimate objects like rocks. Along with this went the theory of the four humors to explain how the human body functioned and how to treat it. This theory was first proposed in ancient Greece by Hippocrates, the father of medicine; refined by another physician, Galen, in the second century A.D.; and turned into rock-solid doctrine by the Church in the Middle Ages. It is a philosophy of food, and attempts to provide balance, like India's Ayurvedic medicine. Physicians had nowhere else to get information about the human body because the Church imposed an absolute ban on Christians performing autopsies. There was also no experimentation or firsthand observation of disease or the living human body. Scientists didn't know that the blood circulated through the body until the eighteenth century. So food was medicine, and

the theory of the four humors was the medical bible. It is important to remember when you look at the chart below that what category a food was in had nothing to do with how it appears, but with the effect it supposedly had on the body. One problem with the chain was that food animals didn't really fit. They were sandwiched in between air and water, because although they lived *on* the earth, they weren't *in* it like carrots, which were only fit for the lower classes. There were also rankings within each category. Chicken, higher in the air element, was served at banquets attended by the nobility. And, of course, cooking it by a hot, dry fire method like roasting made you that much closer to God. Pork, the least valued of the food animals, was fit for peasants. Veal and mutton were in the middle. Fruit, which grew on shrubs and trees, ranked higher than vegetables, which grew in or on the ground, and the higher up in the tree the fruit was, the more it was fit for nobility.[3]

THE GREAT CHAIN OF BEING AND THE FOUR HUMORS[4]

Element	Humor	Emotion	Color	Temperature		Animal/Plant
God						
Angels						
fire	yellow bile	choler (anger)	yellow	hot	dry	phoenix (mythical); spices
air	blood	sanguine	red	hot	wet	birds, fowl, meat animals
water	mucus	phlegmatic	clear/white	cold	wet	whales, fish, crustaceans
earth	black bile	melancholy	black	cold	dry	trees, leafy plants, roots
Rocks and Inanimate Objects						

The theory of humors was that one of these four personality types predominated in each person. If you were sick, your body was out of balance because one of the humors had overwhelmed the others. This could result in anything from pale skin and irritability to cowardice, leprosy, and death. It was crucial to restore balance by eating something that represented the opposite element. For example, brains and tongue were cold and moist, so they had to be counteracted by hot, dry spices like pepper, ginger, and cinnamon.[5] Vinegar (*vin aigre*—literally, "sour wine") was considered cold and dry, so a vinegar-based sauce had to be balanced with hot spices like mustard, garlic, and rue.[6] So did a sauce based on *verjus* (literally, "green juice"), the unfermented juice of unripe fruit, usually grapes, but also crabapples.

Foods within each humor were further divided into degrees from one to four, fourth being the most intense. In the Late Middle Ages, after contact with Muslims because of the Crusades, hot spices included cinnamon, clove, pepper, and others from the Middle East. Cinnamon,

cumin, and nutmeg were hot and dry in the second degree, so they were very beneficial to health. Black pepper was a fourth degree spice, so it was dangerous and had to be used sparingly. At the other end of the scale were mushrooms, fourth degree cold and wet, to be avoided always.[7] As food historian Jean-Louis Flandrin points out, "In medieval recipes . . . hot ingredients played a crucial role. In fact, they dominated the seasoning."[8] Looked at from the point of view of dietetics, the heavy use of spices in medieval cooking makes more sense. It also explains why so many medieval recipes result in food that is spicy, sweet, and sour. It is not to mask food that had gone bad, especially meat. Bad food smelled as bad to people in the Middle Ages as it does to us, and laws forbade selling meat more than one day old.[9] Among the upper classes, the good host played it safe and served a variety of foods to restore the balance of all personality types. Hungry peasants bent the rules and ate a diet heavy in vegetables.

Food Fable

"FEED A COLD, STARVE A FEVER"

"Feed a cold, starve a fever." Have you ever thought that old saying makes no sense because you're supposed to stuff yourself when you're congested? It's a holdover from the Middle Ages in our culture. It does make sense if you look at it from the medieval idea of humors and restoring balance to the system. The theory is that eating will make the stomach work, which will heat it up and counteract a cold. On the other hand, not eating is supposed to make the stomach cool down and counteract a fever.[10] Medieval recipes reflected this—people with fevers had to avoid spices.

The Breakdown of the Latin Language

The learned men of the time—the nobles and the clergy—could understand each other when they talked about dietetics and the humoral theory because they wrote and spoke Latin. But the spoken language of the serfs deteriorated into the vernacular—local languages with less complicated grammar. Italian, French, Spanish, Portuguese, and Romanian are called the Romance languages because they are derived from Latin, the language that was spoken in Rome. A Latin saying about food was also preserved in the Romance languages. *De gustibus non est disputandum* means "there's no arguing about tastes." In French, this became *chacun à son goût*, "everyone to his own taste," and in Italian, *tutti i gusti son gusti*, "all tastes are tastes." English is a blend, about sixty percent

Latin and forty percent German. The following chart shows what happened when Latin broke down into the Romance languages, and also the influence of German on English.

THE BREAKDOWN OF LATIN AND THE CREATION OF ENGLISH

English	Latin	Italian	French	Spanish	German
cook (noun)	coquus (cocus)	cuoco	cuisinier	cocinero	koch
kitchen	culina	cucina	cuisine	cocina	küche
bread	panis	pane	pain	pan	brot
wine	vinum	vino	vin	vino	vein
egg	ovum	uovo	oeuf	huevo	ei
poultry/hen	pullus	pollo	poulet	pollo	henne
milk	lac	latte	lait	leche	milch
cow	va	vacca	vache	vaca	kuh
honey	mel	miel	miele	miel	honig

Note: Even though the word for chicken is spelled the same in Italian and in Spanish, it is pronounced differently. In Italian, it is "PO low." In Spanish, it is "POI yo."

The Vikings

Europeans and Russians had a common enemy. Down from Scandinavia—now Denmark, Norway, and Sweden in northern Europe—swooped the Vikings. Because they came from the north, the Vikings were also called Norsemen, Northmen, or Normans. The Vikings were extremely skilled sailors. They built ships that were so shallow they could come within a few feet of shore and attack without warning. They raided towns and monasteries to steal food and left terror everywhere they went. Using oars and later sails, their ships went south into Russia and even to Byzantium. Their greatest raids were against England and northern France, where they influenced the culture, especially the language. Our days of the week are named after Viking gods—the warrior gods Tiwa, Odin or Wodin, and Thor (who had the thunderbolt) are Tuesday, Wednesday, and Thursday, while the love goddess Freya, the Vikings' Venus, is Friday. The territory the Vikings conquered in northern France is named after them—Normandy. A thousand years later, in 1944, Normandy Beach was where the Allies invaded Europe to retake it from the Nazis in the greatest amphibious military invasion the world has ever seen.

What we know about the Vikings comes from archaeological excavations. Their diet was heavy in meats and animal fats. Milk was turned into butter and cheese and eaten at both meals. The morning or day

(dag) meal—*dagverther*—added bread and porridge. The evening or night *(natt)* meal—*nattverthr*—added meat. Fresh-killed meats were spit roasted or pit cooked; older, tougher meats were boiled in soup or stew. Preservation methods were drying, brining, and smoking. The most common animal was pig. Wild land animals were hunted for food, for sport, and to keep them from destroying crops. They trained hawks to kill wild birds. Saltwater and freshwater fish and mammals were hunted for food and trade. Eel and salmon could also be used to pay rent for property. In Viking settlements in England, the most common fish was cod; in Germany, it was herring. Of less importance in the Viking diet were fruits and vegetables. Wild fruits like apples, pears, and berries—strawberries, raspberries, blackberries, elderberries, and lingonberries—were gathered, not cultivated. The most common vegetables were cabbage, carrot, turnip, parsnip; the most common grains were barley and rye.[11]

The raids finally stopped because the Vikings were able to grow their own food when the climate changed as Europe entered a time known as the Medieval Warm Period.

The Medieval Warm Period and the Northern European Agricultural Revolution

The years 950 to 1300 were a period of global warming. Icebergs began to retreat. Northern seas that were formerly frozen were now navigable; the growing season was longer so more food could be produced. The Vikings stopped raiding and started exploring. They settled Iceland, then Greenland, which was colder than Iceland. (The name was a public relations ploy—they thought it would attract settlers.) From Greenland, they went southwest into Newfoundland, in modern Canada. They called it Vinland—Vineland—after the grapes (maybe cranberries?) they found growing wild there.[12] A Viking settlement has been excavated at the mouth of the St. Lawrence River in Canada.

Around the year 1000, because of the longer growing season, advances were made in agriculture that increased food production. Fields were split into thirds and farmed two-thirds at a time instead of one-half. Crop rotation allowed one-third of the field to lie fallow and regain nutrients while the other two-thirds produced food. New technology in the form of a harness that allowed horses to pull plows more efficiently also aided in increasing crops. However, some of the crops that grew were not necessarily healthier.

"Crazy Bread"

One of the foods that everyone ate during the Middle Ages was bread—when they could get it. Famines occurred twice a year: at the end of win-

ter, when the previous year's crops were all used up, and in the middle of the summer, when the fields were full of crops not yet ready to harvest. Desperate people ate what they could, even if it made them sick. Sometimes they got poisoned by ergot, a fungus that grows on grains, especially rye. Ergot poisoning could cause hallucinations, twitching, and dry gangrene—limbs went numb, turned black, and then fell off but there was no wound. The ergot fungus wasn't destroyed by harvesting, drying, milling, or baking. The loaves that contained the fungus and caused these horrors were called "crazy bread." Over the five centuries from the eleventh to the sixteenth century, there were many episodes of ergot poisoning, which people thought of as epidemics of disease. But in controlled doses, ergot was used as a medicine in the Middle Ages, especially to speed up childbirth.[13]

So, although life in the Middle Ages in Europe improved somewhat because of the Medieval Warm Period, it still left much to be desired. Serfs were still tied to the land, eating bad food and leading a monotonous existence. The Church said it was what God intended them to do with their lives. But soon, a new pope would claim that God had a different plan for them, something much more exciting.

While the old Roman Empire in Europe fragmented even further, a new religion was gaining strength and unifying territory in the eastern Mediterranean.

THE MUSLIM EMPIRE: BAGHDAD

Muslims believe that in the beginning of the seventh century, the Angel Gabriel spoke to Muhammad (also sometimes spelled Mohammed), a forty-year-old Arab from a powerful family from Mecca in present-day Saudi Arabia, and revealed the teachings of God—Allah. These are written in the holy book, the Qur'an (also sometimes spelled Koran). The people in Mecca had their own polytheistic religion and forced Muhammad and his followers out of Mecca in the year A.D. 622 in the Christian calendar, which is the year 1 in the Islamic calendar. They traveled to Medina where they regrouped. In 630, Muhammad and 10,000 of his followers returned—armed—and Mecca surrendered. In honor of Muhammad's triumphant return to Mecca, Muslims make a pilgrimage, called a *hajj* (hahj) to Mecca at least once in their lifetime. The government of Saudi Arabia grants special visas, free of charge, to pilgrims making the hajj. The government website has an overlapping Islamic/Christian calendar, and reminds visitors that in Saudi Arabia, "Sectarian, political or religious gatherings are forbidden."[14] Muslims must also face Mecca and pray five times a day, and fast during the holy month of Ramadan.

The Islamic calendar is lunar, so each year begins about eleven days earlier than the year before. Just as the Christian calendar has "A.D.," an

abbreviation for the Latin *anno domini*, "in the year of our lord," the Islamic calendar has "AH," an abbreviation for the Latin *anno hegirae*, "in the year of the *hejira,"* which is Muhammad's exile to Medina. The Islamic 1428 AH begins on January 20, 2007. For more information on how the Islamic lunar calendar is calculated, see http://aa.usno.navy.mil/faq/docs/islamic.html.

The Muslims stepped into the vacuum created by the fall of the Roman Empire and conquered much of the same territory across three continents. In Europe, they invaded and conquered Spain. Their armies swept into northern Africa including the Sahara Desert, and the east coast along the Indian Ocean; in Asia, they controlled what had been the Persian Empire, the modern countries of Iraq and Iran, and western India. Their capital city, Baghdad, in present-day Iraq, became the new Rome, a center of trade with a population of almost one million. Muslim ships sailed across the Mediterranean and Arabian seas and the Indian Ocean; camel caravans traveled the Silk Road into China and across the deserts of Africa.

The Muslim religion helped to create the Muslim Empire and a rich blend of cuisines and cultures. Making a pilgrimage forced Muslims to travel. Muslim merchants trusted other Muslims: they believed in the

Holiday History

RAMADAN

Ramadan is the holiest month in the Muslim calendar. It was during Ramadan that the Angel Gabriel appeared to Mohammed and revealed the Qur'an. Ramadan reminds Muslims that there is more to life than earthly things, and that fasting is not enough. If a Muslim does not "abandon falsehood in words and deeds, Allah has no need for his abandoning of his food and drink."[15]

Ramadan is observed with a month-long fast which shifts every year because of the Muslim lunar calendar. So, unlike the Catholic Lent, which always occurs at the end of winter when food is scarce, Ramadan can occur during harvest or planting time. In 2007, the first day of Ramadan falls on September 13.

Every day during Ramadan, nothing can be eaten from sunup to sundown. Muslims must also abstain from sex and tobacco during this time. Breakfast has to be finished before dawn. After sundown, the day-long fast is broken, traditionally by eating dates and water. Dinner follows. The end of Ramadan is celebrated with a feast called Eid il-fitr. Because the world of Islam is large and spread out through many countries and continents, the foods that break the fast vary from region to region. They often begin with a rich meat soup and end with sweet desserts like baklava or halvah.

same God, spoke the same language, had the same beliefs, used the same money. They even trusted each other across long distances, giving a written note of payment—a *saqq*, which came to be pronounced "check." The Muslims also had something very powerful that they had gotten from the Hindus in India: numbers. What the world knows as Arabic numerals—1, 2, 3, 4—were invented by Hindus. So was the zero. These numbers aided business because they made it possible to add, subtract, multiply, and divide in ways that were impossible with Roman numerals, where $i = 1$; $v = 5$; $x = 10$; $c = 100$. It would be very difficult to multiply *xviii* × *cc*. But multiplying 18×200 is easy. To India, they brought the Muslim religion and foods: melons, pomegranates, grapes and raisins, peaches, almonds, pistachios, cherries, pears, and apricots.[16]

The Muslims also had a vast literature of poetry, stories, and fables like *Aladdin and the Magic Lamp, Ali Baba and the Forty Thieves,* and *The Thousand and One Nights*. Dreams of flying carpets must have seemed like supersonic travel to people who plodded across the desert on camels for months. Another dream involved turning ordinary substances into gold, or finding a way to turn gold into food. This was the pseudo-science of alchemy. People in the Middle Ages believed that gold could cure dangerous diseases and confer immortality. The alchemy craze spread into Europe. If gold couldn't be turned into real food, then maybe the same effect could be achieved by making real food look like gold. This was done with spices like turmeric; and saffron, which was grown in England, Spain, and Italy after a British pilgrim smuggled a bulb out of Asia Minor.[17]

The Muslim Meal

Caliphs and sultans had cooking staffs which might be free or slave labor, under the direction of a master chef whose first priority was to make sure that nobody poisoned the food and killed the ruler. The Mediterranean meal begins with *mazza* (sometimes spelled *mezze* or *meze*), which is often translated as "appetizer." As Mediterranean food authority Clifford Wright explains in his masterwork, *A Mediterranean Feast*, the concept of appetizer—something to remind your stomach to get excited about eating—is ridiculous to Arabs. You're either hungry or you aren't, and if you are, your stomach doesn't need a warm-up. The only thing *mazza* has in common with appetizers is the small size of the portions. Wright says that since these tidbits can be an entire meal, *mazza* is closer to smorgasbord.[18] (For in-depth Mediterranean food history and unfailingly excellent recipes, see Wright's website, www.cliffordawright.com. It is a feast, one of the best on the web.)

The earliest Muslim recipes date from Baghdad in 1226. They were recorded by al-Baghdadi, who "loved eating above all pleasures," as cookbook author Claudia Roden tells us.[19] Many of al-Baghdadi's recipes are for glorious tagines—meat and fruit stews simmered for hours over a

low flame until the meat is falling-apart-melt-in-your-mouth tender. This complies with the Arab dietary law about not eating blood. An example is *mishmishiya*, made with lamb and dried apricots. It gets its name from the Arab word for apricot, *mishmish*. Cumin, coriander, cinnamon, ginger, and black pepper provide the spice; saffron, the color; ground almonds, the thickening.[20] Stews are perfumed with waters distilled from rose petals or orange blossoms. Another recipe is for almond-stuffed meatballs shaped into logs, browned in the fat of the fat-tailed sheep, and simmered in a sauce of almonds, pistachios, and the usual spices—cumin, coriander, cinnamon, and black pepper—and garnished with "sugar candy dates."[21] As in many early cookbooks, al-Baghdadi provides ingredients and instructions but no amounts. Roden remedies this by including al-Baghdadi's recipes alongside her modern versions—with amounts—in *A Book of Middle Eastern Food*.

Milk, usually from sheep or goats, was made into yogurt or preserved in salty cheeses like feta or kasseri. Vegetables and pulses like eggplant and chickpeas were and still are pureed and mixed with garlic, lemon juice, salt, and sesame paste—tahini—to make baba ghanoush and hummus. Spinach was eaten often. Starches included bread cooked by slapping it onto the side of an oven called a *tannur* (like the Indian tandoor); rice, an import from Asia, mixed with dried fruit and nuts to make pilaf; and couscous—steamed semolina—which is the national dish of Morocco, Tunisia, and Algeria in northern Africa.[22] Grape leaves and eggplant are stuffed with mixtures from the less expensive all-rice to the extremely expensive all-meat. Olive oil can be a garnish or an ingredient. In one famous dish, olive oil is used in alarming quantities.

Food Fable

IMAM BAYALDI—"THE HOLY MAN FAINTED"

The name of the Turkish dish *imam bayaldi* means "the imam (holy man) fainted." According to legend, the imam either swooned in ecstasy when he tasted such a heavenly dish or passed out when he got the bill for the olive oil in it. In any case, Claudia Roden's modern version calls for one-half cup of olive oil for six long medium-sized eggplants (not jumbo American ones), with additional olive oil in the stuffing.[23] Clifford Wright's recipe uses ten tablespoons of extra virgin olive oil for one and one-half pounds of eggplant.[24]

The finale to a Muslim meal was a spectacular dessert made with sugar, which the Arabs had learned how to extract from sugarcane

through trade with India. Arab conquerors who controlled Sicily from 827 to 1091 introduced sugarcane cultivation there in the tenth century.[25] Much of the preparation of sweets was done in convents, perhaps a refuge for Muslim women, used to living in the protection of the harem, who converted to Christianity and joined a convent to maintain their protected status. These are the legendary desserts such as baklava—flaky phyllo (or filo) pastry layered with butter and ground pistachios and drizzled with sugar syrup scented with orange-flower water; and dates stuffed with sugar and ground almonds and dipped in a rosewater-scented sugar syrup.[26] (Phyllo pastries can also be made savory, like Greece's spinach-cheese turnover, spanakopita.)

The Muslim Diet

Many Muslim dietary restrictions correspond to the dietary laws of the Jews. For example, Muslims were also forbidden to eat pork, as well as blood, and any animal that was dead but not killed specifically for food (like roadkill). Animals that were killed for food had to be killed in a ritualistic way. The butcher had to say, "In the name of God, God is most great," and then cut the animal's throat while it was conscious. This is called *halal* meat, and means to Muslims what meat killed by a kosher butcher means to Jews. Any animal killed in the name of another god is prohibited.[27] In the Middle Ages, Muslims preferred mutton and camel hump.

"Drinking fermented beverages was also prohibited in order to keep Muslims from praying while intoxicated."[28] Mohammed did not like the violence that followed drinking. Wine could be a reward in paradise,



Food Fable



WHERE COFFEE COMES FROM

The goats were behaving strangely. Instead of foraging for food, they were running around, leaping up in the air, butting heads. The shepherd boy, named Kaldi, in eighth-century Ethiopia, on the east coast of Africa, was worried. What could have caused this? When it continued the next day, he watched them and saw that they had found something new to eat: the small red berries and glossy green leaves of a strange tree. After they ate the berries, they started dancing and doing what for goats passes for singing—bleating. When the goats showed no other effects from eating this strange new food (like falling over dead, which the boy was afraid of), he tried some, too. He liked the way they made him feel.[29]

where it wouldn't be abused, but it is forbidden on earth. However, a new food that was becoming popular in the Muslim Empire was welcomed by the religion: coffee.

Coffee: Red Berries and Dancing Goats

The truth: coffee does grow on a tree with glossy green leaves and small red berries, called "cherries." As for the dancing goats—anybody's guess. At first, people got their coffee just the way the goats and the goatherd did: by chewing the leaves and berries. Then the leaves and berries were steeped in water, like tea. The cherries were also ground into a paste and mixed with animal fat and eaten. It was not until the sixteenth century that the berries were roasted, ground into a powder, and mixed with water to produce the beverage we know as coffee. It was accepted by Muslim monks because it kept them alert through their prayers.[30] It was also advertised as a medicine that could "aid digestion, cure headaches, coughs, consumption, dropsy, gout, and scurvy, and prevent miscarriages."[31]

So coffee began as a special drink, used in ritual ways in ritual spaces. Wealthy people had a separate room in their home for taking coffee.[32] The lower classes went to public coffeehouses. Coffee soon became an international commodity. And, until almost 1900, it was all arabica beans.

THE EASTERN ROMAN EMPIRE: BYZANTIUM

Between Christendom and the Muslim Empire was the Byzantine Empire. The Eastern Roman Empire was wealthy, Christian, and Greek, although they spoke Latin, too. It controlled the Roman Empire in Asia, east as far as the Tigris and Euphrates rivers, the north coast of Africa, and Egypt inland down the Nile. The empire's capital, Constantinople, was ideally situated for trade where the Black Sea, fed by some of the major rivers of Europe, joined the Mediterranean. It had a good natural harbor and an abundance of fish. Constantinople was a city of learning and markets and sports. It preserved Latin culture and Roman foods, like garum, which disappeared in the west after the fall of the western empire. The main arena in Constantinople, the Hippodrome, could hold 60,000 spectators (10,000 seats more than the Colosseum in Rome), cheering for their favorites in horse races. But because it was a Christian city, there were none of the bloody, to-the-death events that had taken place in the western empire. However, the Byzantine Empire, like the Western Roman Empire, used slave labor. Their slaves came from what is now Eastern Europe: Bulgaria, Russia, Poland, Czechoslovakia,

COFFEE CHRONOLOGY[33]

8th c.	Ethiopia—legend of the dancing goats
900s	Coffee first appears in writing, by Arab physician, Rhazes
By 1500	Muslim pilgrims spread coffee to Persia, Egypt, Turkey, North Africa
1511	Governor of Mecca says the Koran forbids coffee and closes coffeehouses because people gather there and make fun of him
1536	Coffee exported through city of Mocha in Yemen; called "Mocha"
1600s	India begins cultivation from seeds smuggled in by a Muslim
1650–1690	Coffeehouses open in England (and banned briefly), Germany, Venice, Paris, Vienna
1696	Paris doctor prescribes coffee enemas
1699	Dutch transplant trees to Java in Indonesia; coffee becomes known as "Java"
1710	French invent infusion method of brewing coffee
1723	French begin growing coffee on Martinique in the Caribbean; later Haiti, too
1727	Coffee smuggled into Brazil
1773	Boston Tea Party—Americans stop drinking tea as a political protest
1788	Santo Domingo grows half the coffee in the world
1820	Caffeine ($C_8H_{10}N_4O_2$) isolated from green coffee beans
1832	Coffee replaces rum as official drink of U.S. Army
1833	First commercial coffee roaster imported to U.S., to New York City
1850	Jim Folger sells pre-roasted coffee to California gold miners
1869	Coffee leaf rust *(hemileia vastatrix)* destroys East Indies coffee industry; *robusta* from central Africa emerges as resistant alternative
1878	*The Spice Mill*, first U.S. trade publication for coffee (and tea and spices)
1878–1880	São Paulo, Brazil, coffee floods world markets, price drops, market collapses
1881	Coffee Exchange opens in New York to regulate prices
by 1900	Americans drink 50% of the coffee in the world
1900	Hills Bros. invent vacuum-packed coffee can
WWII	American G.I. Joes drink so much coffee it becomes known as "a cuppa Joe"
1966	Alfred Peet opens specialty coffee shop in Berkeley, California
1971	Starbucks opens in Seattle, sells fresh-roasted beans

and Ukraine. The people from these places were called *Slavs*, which is where the word *slave* originated. In the tenth century, an Eastern Orthodox clergyman went on a mission to bring Christianity and literacy to the slavs in Russia. The Russian alphabet still bears the name of this traveling holy man, St. Cyril—the Cyrillic alphabet.

How Food Helped Russia Choose Its Religion

In 988, Prince Vladimir of Kiev felt he had to decide on a religion for himself and for his people. He knew his people, their habits and likes and dislikes (and his own), so he used food to help him decide. Russians liked pork, so that ruled out Judaism and Islam. Islam had a second strike against it because alcohol was forbidden, which was completely unacceptable to Russians: "We Russians like to drink, and there is no way we can live without it."[34] Christians in Rome fasted too much. False rumors reached Vladimir that Hindus ate humans. So Prince Vladimir chose the Eastern Christianity of Byzantium for his country. It had fast days, too, but peasants could still eat caviar, which was fish, during Lent. In 989, he ordered everyone in the city of Kiev down to the river to be baptized.[35]

Some foods that today are considered traditionally Russian didn't appear in Russia until the end of the Middle Ages or later. Sausage—*kolbasy*—appeared in written Russian for the first time in 1292. Vodka came from Poland (*wódka*) after 1500.[36] Sour cream and borscht also didn't appear until contact with the West after 1500. The potato reached Russia around 1700.

Byzantine Cuisine

The people of Byzantium were just as concerned with food as their Roman counterparts, and their markets were flooded with it, including some foodstuffs the Romans never had, like caviar, mace, nutmeg, and something we consider now a staple of the Mediterranean diet—lemons. Other foods introduced into the Mediterranean diet from western Asia were the eggplant, some melons, and oranges. There was one market for cattle and sheep, another for pigs. Every day, 1,600 boats unloaded freshly caught fish at the docks. The craft bazaars were run by artisans and salespeople who were mostly women. All of these markets were closely controlled by government inspectors who enforced the laws and in some cases, like the fish market, set daily prices depending on the size of the catch.[37]

From fragments of Byzantine books on dietetics, recently translated by Andrew Dalby, we know a great deal about their eating habits. The advice in these books is based on the theory of humors first put forth by the Greek, Galen, but varies wildly from author to author. In some cases, they completely contradict each other. One author lists foods and their properties: "Wheat has a high proportion of heat and is the best of all grains. It produces healthy, excellent blood"; wine "heats the stomach," while mead "gives a good facial complexion"; "sweet mulberries have a hot and moist nature and move the bowels." Medicinal plants include roses (cold and dry) which "help with overheating of the liver,"

violets, myrtle, basil, marjoram, water lilies and white lilies, wild chamomile, sandalwood, camphor, saffron (cold and dry), and cloves and nutmeg (both hot and dry). Aphrodisiacs are chickpeas, melons, dates, rocket (arugula). The author recommends meat because it "is more nourishing than any other food and makes the body healthy," especially "red meat with no fat." The "best and lightest of all meats" is the domestic hen: "Chicken soup cures coldness in the intestines."[38]

A second author arrives at very different conclusions. Leading off in the "foods that are indigestible" category is beef. He lists other categories, including foods that produce good humors, bad humors, are digestible, slimming, move the bowels, settle the digestive system, and "hurt the head"—among them, mulberries, milk, plums, and tarragon. The "least nourishing" line-up contains many foods that we consider extremely nourishing now: fish, beets, grapes, olives, oats, oysters, walnuts. For this author, nothing is an aphrodisiac.[39]

A third self-help book is in the form of a monthly calendar instructing the reader about which foods and activities are right and wrong for each month according to the humoral theory:

> January: sweet phlegm. Take three small doses of fine and very aromatic wine, but not too quickly. Take no food for three hours. Food should be roast lamb served hot, or roast sucking pig, and gravies spiced with pepper, spikenard and cinnamon; . . . also eat pigs' trotters and head, jellied, with vinegar . . . [various vegetables] and their cooking liquor, to be drunk flavoured with spices . . . Four baths in the course of the month . . . Make a compound skin lotion by mixing [aloe, myrrh, egg yolks] . . . After washing the ointment off, rub down with cooling wine and egg yolks mixed with hot rose oil, then make love.[40]

March is the month of moderation in food and sex, with a concentration on sweet flavors. In April, the quality of life will be improved by avoiding "all bitter flavours" and inhaling "the scents of violets, roses, lilies, wild chamomile and all aromatic flowers," while in September, "all kinds of bitter food should be eaten." June, the month of "hot blood," requires eight baths, but no soup or sex. No baths in November, because it is the month of "watery phlegm." Cabbage is taboo in December, but baths, ointment washed off with wine, and sex are prescribed.[41]

All of these books are addressed to literate, wealthy people: they worry about their weight; they bathe in luxury items like wine, eggs, and scented oils; and the spices, like spikenard, are extremely expensive. Spikenard was an oil used in perfume and sometimes food. It came from an herb that grew high up in the Himalaya mountains.[42] They deal with issues that exist in the twenty-first century, too: what to do with this abundance and variety of food, wine, flowers, spices, methods of

cooking. The choices are staggering, and these books provide a way to navigate through them. Again, the search for immortality underlies the advice.

Byzantines had good reason to worry about mortality. A new group of barbarian nomads, the Turks, were pressing in on them from the east. The Byzantine emperor Alexius needed help, so he sent a letter to Europe. He expected a few hundred trained warriors. What he got changed the world.

CULTURE CLASH: THE CRUSADES

Russia's conversion to the Eastern Orthodox religion strengthened the patriarch, the leading bishop of the Christians in the East, and took power away from the pope in the West. After years of sparring through the mail and threatening each other, both delivered knock-out punches in 1054: they excommunicated each other and split into two separate religions. Under the new Eastern Orthodox Church, ministers could marry, people could get divorced, and the government controlled the church, something the Church in Rome would not allow.

In 1093, Pope Urban II saw an opportunity to regain control over the eastern half of the church. Alexius, the Byzantine emperor, appealed to Europe for help because he was afraid the Turks were going to invade Constantinople. The pope decided to kill two birds with one stone: he would send an army of Christians to rescue Constantinople, which would embarrass the patriarch and make him owe the pope. Then the army would continue to the Holy Land and reclaim it from the Muslims, revealing the superiority of the Roman Church. As an incentive, the pope guaranteed that all earthly sins would be forgiven for anyone who went on a Crusade—a ticket to heaven. Some of the Christians had questions: Didn't Christ and the Ten Commandments say, "Thou Shalt Not Kill"? Yes, the pope explained, but Christ meant, "Thou Shalt Not Kill *Christians*"; it was the duty of Christians to kill infidels—non-believers of other religions.

Between 1096 and 1204, there were four major Crusades to the Holy Land. A Children's Crusade followed in 1212. The Church discouraged those who were not professional fighters from going but was powerless to stop them. Many people assumed that God would provide for them, so they just picked up and left without even taking food. Along the way they scavenged for food, stole, and even got into riots with other Christians. This caused famines along the route when they marched, and tremendous inflation in the cost of food.[43] Other crusaders went to North Africa, and the Spanish Inquisition began its own crusade against the Muslims in Spain.

The Crusades caused profound changes in the world and helped to bring about the end of the Middle Ages. After the initial victory in the First Crusade, all the other Crusades were failures—the Christians lost. Jerusalem stayed in Muslim hands after it was recaptured by the Muslim leader Saladin in 1187. The Crusades also weakened the system of feudalism in Europe because the ruling class—lords and knights—spent their fortunes on Crusades and many were killed in battle. The ones who returned after years away got serious surprises. In England, the nobles took advantage of the king's absence to take away some of his power.

The Magna Carta and the First Food Laws

1215 was an important year. In Christianity, Pope Innocent III declared that the communion wafer was the literal, not the symbolic, body of Christ, which created a craze for all kinds of wafers. In England, King Richard the Lionhearted was on a Crusade and left his brother King John in charge. John was a weak king who spent too much money on wars that he didn't win. This angered the nobles, who forced him to sign a document called the Magna Carta—"Great Charter"—which guaranteed some of the basic rights of Englishmen, which are still in effect in England and the United States today: the right to a trial by jury and the right not to be taxed without representation.

Two of the first food laws were also passed around this time. In 1210, King John fixed the price of bread; in 1266, the Assize of Bread regulated the quality. The function of these laws was to prevent bakers from overcharging and from stretching the loaf with things not fit for human consumption, like dirt and stones, and to punish bakers who did.[44]

Other Crusaders who returned to their estates found that many of the serfs, left alone, had taken off to find a better life. They had gone to the new cities that arose along the routes to the Holy Land to provide food and supplies for the Crusaders.

CHRISTENDOM: THE LATE MIDDLE AGES IN EUROPE

Cities and Guilds: The Butcher, the Baker, and the Wafer Maker

When a serf moved to the cities where there were thousands of people, he needed something he had not needed on the manor: a last name. Everyone had a first name, called a Christian name, which they received when they were baptized, but they had no last names. Many simply made their profession their name: Cook; Miller; Smith, shortened from

blacksmith, goldsmith, silversmith, or tinsmith; Wright, as in cartwright or wheelwright, the people who made carts or wheels; Cooper, the people who made barrels; or Baker.

One of the ways people could have a better life in the cities was by getting a profession, like the food professions. The way to get into any trade or craft was to join a guild, which was like a union. The purpose of the guilds was twofold: to control prices and wages. The guild created a monopoly on a certain product, which controlled its quality; and limited the number of people in the profession so that there would not be a glut, which would cause the price people could charge for their goods and services to drop.

There were three stages in guild membership: apprentice, journeyman, and master. Boys were sent into apprenticeship as soon as they were able to function by themselves, usually around six or seven years old. They performed tasks like sweeping up and running errands. They learned at first by observing. When they got older, they began to learn by doing—hands-on. The apprenticeship lasted until the late teen years, when the journeyman stage began. In this phase, the craftsperson was given increasingly complex projects and responsibility, which could include supervising apprentices. The final stage was becoming a master. To do this, the journeyman had to complete a project entirely on his own, to the satisfaction of the master and the requirements of the guild. Only then could he call himself a master craftsman and set up his own shop. For example, the requirements of a journeyman wafer maker were to produce a minimum of 800 wafers, in three different sizes, per day.[45] Not everyone attained master status; many remained journeymen all their lives, just as today, not everyone becomes an executive chef.

One way guilds promoted themselves was by advertising. They donated money for stained-glass windows in the new churches that were being built. Rising sometimes more than 100 feet, these cathedrals dwarfed every other building in the area and could be seen for miles: Notre Dame and Chartres in France; Canterbury, Westminster, and Durham in England; Dresden in Germany. The cathedrals used new architecture that had narrow stone supports inside leading up to the characteristic pointed Gothic arch. The large spaces between the arches were adorned with something new: glorious stained-glass windows that flooded the cathedral with multi-colored, heavenly light. However, the glass could be made only in small pieces, not large sheets, so all the windows were mosaics. In these windows, in color, we can still see people in the food professions—butchers, bakers, fishmongers, grocers, and tavern keepers—engaging in the daily activities of their professions.[46] Tavern owners also advertised by having criers walk the streets beating a bowl of the wine special for the day and calling out to entice people to have a taste.[47]

The cathedrals were centers of life for the community. The faithful attended Mass every Sunday (preferably every day); the open space in front



Nôtre Dame *Photo courtesy John Bandman, Certified Chef de Cuisine and Educator, New York Restaurant School at The Art Institute of New York City*

of the church was the marketplace; the bells tolled time. One of the bells was at night, to remind people that it was time to attend to the fires in their fireplaces and go to bed. Starting a new fire was time-consuming and difficult, so many people chose to keep the fire going at night. The danger was that the house would burn down, so they covered the fire. "Cover the fire" was *couvre-feu* in French, which became *curfew* in English.

As the cities grew, there was increasing specialization in the professions. They subdivided into narrower and narrower groups. For example, the definition of baker was very strict: the person who kneaded the dough and shaped it into a loaf. The person who tended the fire to make sure the bread cooked at just the right temperature was a different profession. When work was scarce, the two clashed over where one job ended and the other began. Pastry makers made pies, but if the pie had poultry inside, the poulterers wanted control of it. In Paris, bakers controlled pâtés until the pastry guild was formed in 1440, and then pâtissiers had the right to make both sweet and savory tarts. These conflicts sometimes ended in lawsuits.

Sugar: "White Salt"

The new profession of pastry chef was made possible by a new food, one the Arabs had that the Europeans had never seen before and wanted very much. They called it "white salt." Its grains were approximately the same size as those of salt, but it was pure white, unlike salt, which varied from grayish to greenish depending on the minerals it contained. And it was sweet. The Arabs had learned from people in India how to take the sugarcane stalk, remove the juice and leave only the sweet dry crystals. The process was time-consuming and labor-intensive. Sugar—exotic, expensive, tasty—was highly prized by the upper classes in Europe as a medicine. Apothecaries shaved flakes off cones of sugar and sold them by the gram like other drugs. Medieval physicians considered sugar the perfect medicine for treating toothaches.

Wine

The Middle Ages were also the beginning of the commercial wine industry. By the tenth century, the sparkling wines of the Champagne region of France had distinguished themselves by vineyard, and were associated with royalty because they were traditionally served at coronations. By the thirteenth and fourteenth centuries, there were vineyards in the German Rhineland and in the Tokay region of Hungary.[48] In 1398, Tuscany in northern Italy produced Chianti for the first time—and it was white.[49]

In 1395, Philip the Bold, the Duke of Burgundy, ordered that only pinot noir grapes were to be grown in Burgundy. Some vintners had begun cultivating gamay vines, which produced more grapes that were hardier and ripened earlier. Philip declared that wine from gamay grapes was foul, bitter, and an offense to the reputation of Burgundy. He ordered the vines torn out. The gamay grape found a home elsewhere and eventually became the basis for Beaujolais wines, but Burgundy is still made from pinot noir grapes.[50]

Other wine-growing regions also became known by name to wine connoisseurs. The Church inadvertently helped in this when a political struggle in the fourteenth century resulted in two popes, one in Rome and one in Avignon in southern France. The wine the French pope drank came from a vineyard that was called *Châteauneuf-du-pape*—"the pope's new castle." Later, the Crusades helped further the wine industry because nobles who left to fight often donated vineyards to the Church so that the monks would pray for their success. If they died, their families donated vineyards so that the monks would pray for their souls. By the end of the Middle Ages, one order of monks, the Cistercians, a division of the Benedictines, owned the largest vineyards in Europe. They had been helped in France by King Louis VII, who exempted their wines from taxes on shipping and sales.[51] Wine was also used as currency, and sol-

diers' rations always included wine. In England, it was cheaper than ale by as much as twelve to twenty-four times, and although they didn't know it at the time, it was also healthier—wine kills typhoid bacteria in contaminated water.[52]

The wine merchants' guilds had a great deal of political power, because they were often the city government, and taxes on wine paid for many of the expenses of running medieval cities. In London, the Vintners' Company controlled the wholesale and retail wine trade, and received a charter from the king in 1437. Medieval cities passed laws to control the importation and sale of wine, to standardize weights and measures, and to punish tavern owners who tried to cut corners by adulterating wine or passing cheap or sour wines off as more expensive ones. Punishment included fines, having the barrels of bad wine smashed and dumped in the streets, and being forced to drink your own rancid wine.[53]

Cheese

Many cheeses still important today—Emmentaler, Gruyère, Parmesan—were first produced in the twelfth century. These are formed into huge round wheels, each made of as much as 1,000 liters of milk, so dairy farmers from an entire region contribute. The Latin word for cheese—*caseus*—is the origin of the English word *cheese* and the Spanish *queso*. The French and Italian words for cheese—*fromage* and *formaggio*, respectively—are also from Latin, but from the word *forma*, because the Romans shaped their cheese by putting it into baskets or forms. Some cheeses like Port du Salut are named after the monasteries that produced them. "The monks of the Benedictine and Cistercian monasteries, thanks to whom the population did not starve to death entirely during the Dark Ages, were the pioneers of the new cheese-making industry of medieval times."[54]

Beer and Bees

One way to preserve grain through the winter was to ferment it and turn it into beer. In the Middle Ages, beer was flavored with an herbal mix called *gruit*. This was three herbs: yarrow, wild rosemary, and sweet gale, also called myrica gale. They were considered aphrodisiacs and narcotics. By the end of the Middle Ages, hops had come into use to flavor and preserve beer. Although some countries still make beer without hops, this was the beginning of beer as most of the world knows it.

Bees were highly prized for honey; for beeswax which made sweet-smelling, dripless candles; and for propolis, the bee-glue that kept the honeycomb together and which was used as an ointment, like a me-

dieval antibiotic. (The Egyptians had used honey, which completely blocks out air, as an antibiotic, too.) It was not just honey for sweetening and medicine that made bees so valuable; it was also turned into that ancient drink, mead. But bees and honey were difficult to come by, so in medieval England if you saw a bee fly by, you said a quick prayer to get it to stay on your land: *Sit down, sit down, bee! / St. Mary commanded thee!*[55] Calling on St. Mary in this prayer is an example of how the Church adopted native pagan rituals and charms. Rather than constantly fighting (and losing against) local pre-Christian customs, the Church allowed the peasants to keep them, but instructed them to substitute "Christ" or "God" for "Father Heaven" and "Mary" for "Mother Earth."[56] The Church had to neutralize many folk beliefs that had been in existence for thousands of years.

Holiday History

HALLOWEEN, OCTOBER 31, AND ALL SAINTS' AND ALL SOULS' DAYS, NOVEMBER 1 AND 2

Halloween and All Saints' Day are examples of how the Catholic Church used a pagan festival to reinforce Christianity. Halloween began in Ireland as Samhain, a celebration of the New Year. This ancient festival was based on folk beliefs that the souls of the dead wander the earth until they are put to rest. The best way to counteract these goblins is to make yourself look like them, a form of sympathetic magic. Christians renamed it All Hallows Eve. *Hallow* is from the Old English word *halig*—"holy," as in the Lord's Prayer: "Hallowed be Thy name." The "een" part of Halloween is short for evening.

Centuries later, in America, the symbol most often associated with Halloween became a squash native to the Americas—the pumpkin. Huge, round, and orange, it ripens in October. Hollowed out, with scary shapes carved into the shell, and a lighted candle inside, it becomes Jack O'Lantern, a phantom waving a light.

Children roam at night, ringing doorbells, playing pranks like covering the houses and shrubbery of unsuspecting neighbors with toilet paper, and demanding candy and other treats or they'll play more tricks—"Trick or Treat." In 1922, candy corn, the triangular-shaped, orange, yellow, and white striped candy, was first manufactured.

Increasingly, Halloween celebrations in the United States are private parties because crazy people plant razor blades in apples or toxic substances in candy. Some Christians do not celebrate Halloween because of its pagan origins. In Catholic countries, the two days after Halloween, All Saints' Day and All Souls' Day, are holy days. In Mexico they are called Day of the Dead (*Dia de los Muertos*).

The Medieval Meal

The medieval meal began and ended with prayer and the washing of hands. The best linen was used at the start when hands were relatively clean; ordinary napkins were saved for the end, when diners' hands were dirty. The washing bowls were made of silver or gilded—covered with gold. If you were really important, your family crest might be engraved in the bottom of the basin.

Where you sat at the table also indicated how important you were. If you sat at the head of the table or were the guest of honor, you sat in a chair by yourself and you were "above the salt." You got better bread—made of light wheat flour—more of it, and it was served to you. The farther down the social scale you were, the darker the bread. You also got less of it and had to reach across the table to serve yourself. If you found yourself eating one small roll of stale, dark, rye bread, sitting on a bench, far away from the salt, you were in social Siberia and no serving person would waste his time on you.

There was no separate dining room, just a room where boards were set up on trestles and draped with cloths for as long as the dinner lasted, then taken down. The permanent piece of furniture in the room was the buffet, where the host displayed his wealth, maybe expensive gold and silver serving pieces, bowls, and so forth. The kitchen was separate from the main house because of the danger of fire, so the food was probably not warm when it arrived at the table accompanied by an armed guard, even though it was covered. It was delayed again while it was checked for poison in the most elaborate and unsanitary way possible.

Food Fable

THE POISON TASTER

"Unicorn [a mythical beast] horn, which was thought to bleed in the presence of impurity, was much favored. Agate was in more frequent use, being easier to obtain, as were various objects alleged to be toadstone—that (nonexistent) precious jewel believed to be hidden in the head of the toad. Salt was tested with serpent's tongue, known more prosaically now to be the tooth of a shark."[57]

While everybody was busy looking for exotic poisons, they were missing the bacterial cross-contamination that was right in front of them, especially in the handling of poultry and eggs, the fingers or spoons dipped repeatedly into pots, and pots made of lead or tinned copper with the tin worn off.

At the table, there were serving platters but no plates. Whole-wheat bread, several days old and cut into rectangles, was used as plates called trenchers. Liquids were put into a small bowl that two diners shared. No forks—you ate with your hands, and when you reached into the communal dish for one of the various kinds of meat, you were careful in case somebody else was reaching for something by stabbing it with his knife. (This later came to be known as *service en confusion.*[58]) Wine was served diluted with water (every household has a budget). One of the most expensive and elaborate pieces on the table was the *nef*, the salt cellar in the shape of a ship, perhaps silver or gilt.

Food was fresh in season. Otherwise, meat was preserved by salting or smoking and drying, vegetables were pickled in brine or stored in a root cellar, herbs and fruits were dried. Anybody could present a feast in the summer, but to have a feast in the winter indicated great wealth. So did imported foods, at any time of the year.

The Color of Food

Almonds imported from the Middle East were extremely popular in Europe. They spread across Europe in one dish with different names and different forms. In Italy it was called *bianco mangiare*; in France, *blanc manger*; in Spain, *manjar blanco*; in England, *blanchet manchet,* then later, *blancmange* (pronounced blah manzh). All meant the same thing: white food, even though in England blancmange came in colors and flavors. It was based on almond milk and was thought to be the perfect food: it balanced the four humors; it was smooth, so it was easy to swallow; it was easy to digest; and it was white and therefore very refined and suitable for the upper classes. It was also expensive in northern Europe, because almonds will only grow in warm, mild climates that are not too humid. They grew in the Middle East, southern Italy and southern France, and Spain. Today, Spain and Italy are still among the leading producers of almonds, but more than fifty percent of the almonds grown in the world come from California.[59] Blancmange was expensive also because it was labor-intensive—the almonds had to be ground by hand.

By the middle of the nineteenth century, in American cookbooks, blancmange had become just another pudding, along with rice pudding and custard, which was sometimes suggested as an accompaniment. The main ingredient—almonds—had disappeared from the recipes, replaced by convenient foods as thickeners. Catharine Beecher's *Domestic Receipt-Book* had five recipes for blancmange. One even suggests adding almonds: "Three ounces of almonds pounded to a paste and added while boiling is an improvement."[60] Blancmange was popular until the 1970s when, according to *The Joy of Cooking,* "after a run of nearly a thousand

years, the term vanished."[61] A modern Afghanistan version, called *firnee,* is a cornstarch pudding with chopped almonds, saffron seasoning, and a pistachio garnish.

In the Middle Ages, almond milk—almonds soaked in water and pressed until the water is the thickness of milk (or cream or cheese)—was a useful food during Lent, when any animal products, including eggs and dairy, were forbidden. Now we call this vegan. Almond milk is also one of the mainstays of the current raw food movement.

Presentation was extremely important in the Middle Ages, sometimes more important than taste, because the intent was to show off wealth. At a medieval banquet, a feast for the stomach was not a guarantee, but a feast for the eyes was. The most elaborate dishes were peacock and swan, which arrived at the table cooked and dead looking better than they ever had in life. The birds were killed and skinned carefully to keep the feathers intact. Then the meat was cooked and stuffed back into the skins. The beaks and feet were gilded. Completing the presentation was a beautiful young upper-class woman as server.[62]

Pies were another elegant presentation, and also functional. Before plastic, the crust contained and preserved the filling. Sweet or savory pies had their lids put back on and were stashed in a cold cellar until the next time they were served. This might be served as an *entremets,* an entertainment between the main courses, the *mets*. At the end of the meal the guests received *comfits*—sugar-coated breath freshners, often caraway seeds, like anise *pastilles* now.

For the upper classes, after the white food, the other courses could be as many colors as the rainbow of fruit and vegetable dyes could make them. Red grapes or cherries tinted garlic sauce pink; blackberries and mulberries made anything deep blue or purple; parsley turned it green. In Europe, as in the Middle East, one color was prized above all others: gold. Humans persisted in their search for two things: gold and eternal life, and they believed one guaranteed the other. While alchemists were looking for a way to turn various substances into gold, cooks took a shortcut and made food look gold. This is called gilded or *endoré* (en door AY) from the French word for gold—*or*. Spices from the Middle East like saffron and turmeric turned food a beautiful golden color, a practice that continues today in dishes like risotto, even though in the Middle Ages, "one pound of saffron cost as much as a horse" (and a pound of nutmeg cost as much as seven oxen).[63] Food could also be covered in gold leaf. Most of the real gold came from Africa, carried in caravans by Muslim traders.

The King's Court: Table Manners

These new foods, new meals, and the rise of the king's court created new ways of interacting—manners. People became self-conscious because for the first time there was a right way and a wrong way to be-

have in social situations, especially at the table. Many words having to do with the new manners came from the king's court, which originally meant courtyard or farmyard or any enclosed space; *courtly*, which meant having upper-class manners; *courtesy*, the acts of politeness toward others that were shown by a *courtier*, someone at court; a woman showed her respect when she made a *curtsy*; a young man and woman were on their best behavior when they were *courting* each other; *courteous*, having respectful, pleasant manners fit for the king's court. Just what had people been doing that needed changing? Here are some of the new rules for upper-class *adults* at the medieval table:

YOU JUST MIGHT HAVE NO MANNERS IF . . .[64]
(with apologies to Jeff Foxworthy, again)

- You spit on or over the table
- You blow your nose into your fingers at the table
- You blow your nose into the tablecloth (which is for wiping your fingers)
- You gnaw on a bone and then put it back in the common dish (you should drop it on the floor)
- You keep your helmet on when serving ladies
- You clean your teeth with your knife at the table
- You pick your nose while eating

Taillevent's *Le Viandier*: "The Beginning of Cooking as We Know It"[65]

These new ingredients and new style of cooking were written down by a Frenchman called Taillevent (real name: Guillaume Tirel; ca. 1312–1395). It is the first European cookbook, although in the days before copyright laws, some sections of his book bear a close resemblance to a book written before he was born. Tirel is an inspiration to anyone in the cooking profession. He began at the bottom of the kitchen ladder as a spit-roaster, endlessly turning the meats on the spit in front of an open fire, but he worked his way up and became master cook to King Charles VI of France. The king was so grateful that he gave Tirel a house, a title, travel allowances, and a coat of arms—three little cooking pots. *Le Viandier* reveals the influence of the Middle East on the cooking of the later Middle Ages in Europe, especially the spices: cinnamon, gin-

ger, cumin, coriander, cardamom. In the following recipe for wassail, substitute honey for the dark brown sugar, and it is straight from the Middle Ages. A Christmas carol from the Middle Ages is about "Now we go a wassailing." In England, the songs were sung in the apple orchard, to the trees, or the following year the harvest would be bad.[66]

RECIPES:

Wassail[67]

from the Anglo-Saxon *Wes hal*, or "Be in good health"

4 large McIntosh apples
¼ cup plus 2 tablespoons dark brown sugar
¼ cup apple juice or cider
3 12-ounce bottles of ale
1 cup sherry
1 cinnamon stick
½ teaspoon ground ginger
½ teaspoon freshly grated nutmeg
zest of 1 lemon

1. Preheat oven to 350°F.
2. Slit the skins of the apples horizontally about halfway down. Place in a greased baking dish and sprinkle with ¼ cup of the brown sugar and the apple juice. Bake, basting frequently for about 40 minutes, until apples are soft; remove from oven.
3. Pour the ale and sherry into a saucepan; add the 2 tablespoons brown sugar, cinnamon, ginger, nutmeg, and lemon zest; simmer for 5 minutes. Add the baked apples and their juice, stir thoroughly, and serve hot.

The reopening of the trade routes created new classes of prosperous people in Europe. But much more than food and gold was exchanged. Stories traveled on the trade routes, too. Some of the most outrageous stories came from a Venetian trader named Marco Polo, who claimed he had been to a place the Europeans called Cathay and which we call China.

Marco Polo: Fact or Fiction?

Marco Polo (1254–1324) was the son of a merchant from Venice, in northeastern Italy, a wealthy, prominent city involved in trade in the Mediterranean. When Polo was seventeen, his father and uncle took him on a

trip to China, which the Europeans called Cathay. The trip was partly business and partly political. Polo's father and uncle had been to Cathay before and returned with gifts from the khan to the pope. Now, they were bringing gifts and greetings from Pope Gregory X to the Great Khan. They followed the Silk Road through Armenia, Persia (now Iran), Afghanistan, and eastward. In his writings, Polo described the desert through which they passed as "entirely mountains and sands and valleys. There is nothing at all to eat." He did, however, taste *koumiss,* femented mare's milk, when they stopped among the Mongols. He compared it to white wine and declared it "very good to drink."[68] Three and a half years and 5,600 miles after leaving Venice, the Polos arrived at the khan's summer palace, then went on to the winter palace in Beijing, the capital. They stayed in Cathay for seventeen years; the khan appointed Polo to several administrative jobs, including tax collector. After Polo returned to Italy, he was captured when Venice and Genoa went to war in 1298. While in jail, he wrote his memoirs. The book was hugely popular throughout Europe, but some called it *Il Milione*—"a million lies"—because it seemed so fantastic. The scale and the grandeur of what he was saying seemed inconceivable.

Polo was impressed with everything he supposedly saw in the khan's kingdom. The canals reminded him of Venice. The summer palace, its walls covered with gold and silver, was "the greatest palace that ever was." Ten thousand pure white horses provided milk for the khan's family. The Chinese bathed several times a week, unlike the Europeans. They also used charcoal for fires instead of wood, and paper for money instead of gold and silver. Polo talked about two-pound peaches, ten-pound pears, and pink pearls. Everywhere he went there was salt: in salt beds and salt pans; salt water being boiled to evaporate the water and leave the salt. There was also silk: in clothes, on walls, on furniture, on

Food Fable

MARCO POLO AND PASTA

For hundreds of years, it was accepted "fact" that Marco Polo discovered noodles in China and brought them back to Europe. Now, in his masterwork, *A Mediterranean Feast,* food historian Clifford Wright states flatly that there is no truth to the story of Polo and pasta. Wright unravels the tangled strands of the origin of pasta and takes it down to its basic ingredient: hard semolina or durum (Latin for "hard") wheat. This makes pasta different from bread, which is made from soft wheat. The Chinese did not have durum wheat. Wright places the origins of "true macaroni"—pasta made from durum wheat and dried, which gives it a long shelf life—"at the juncture of medieval Sicilian, Italian, and Arab cultures."[69]

5,000 elephants passing in review before the khan. There were lions and lynxes and leopards used to hunt bear and deer and wild oxen.

Scholars are still arguing about whether Marco Polo ever went to Cathay. Those who believe he did cite the evidence of silk and other objects in his possession. Those who don't point to the lack of evidence: his name isn't recorded in the Annals of the Empire, the official records of the Yuan Dynasty. And Polo's book doesn't mention things that were common in China at the time, like tea, and foot binding, which crippled women and turned them into expensive objects (and lasted beyond the revolution in 1911).

True or not, Marco Polo's stories set a fire burning in Europe to find a shortcut to the magic lands of Cathay and Cipango. The Crusades had gotten people used to traveling and to seeing and hearing about exotic spices and silks and beautiful clothes and carpets, and they wanted them. These things came from Asia. Soon, Europeans would succeed in getting there, and along the way accidentally find something they had not counted on—an entire new world.



Fourth Course

Tea, Chocolate, and the First Cookbook: MEDIEVAL ASIA, THE AMERICAS, AND RENAISSANCE EUROPE TO 1500

ASIA

China: The Tao of Tea—Tang and Song, 618–1279

In 618, a great new dynasty arose in China. The Tang (618–907) reconquered lands that had not been in the possession of China since the end of the Han Dynasty in A.D. 220 and redistributed them to the peasants. Much of the expansion of China occurred during the reign of China's only female emperor, Wu Zhao. She was the power behind the throne for thirty years, ruling through weak emperors before she finally proclaimed herself emperor in 690. During the Tang period, bananas, dates, citrus, and taro palm were grown in the south. So was litchi, of which the emperor's court was especially fond. Foods that traveled to China via Muslim traders on the Silk Road from Persia and Central Asia included sugarcane, spinach, lettuce, almonds, figs, and grapes in various forms—syrup, raisins, wine.[1] However, another beverage had their

attention: "The age was marked by an obsessive concern with ale. Rarely in the history of the world has alcoholism been so idealized." The use of hallucinogenic drugs was also widespread. Both seemed to be part of a desire for escapist release in a time of many famines.[2] Costly wars and high taxes to pay for them further weakened the dynasty. One of the items taxed was salt, which provided half of the state's income.[3] Salt smugglers took what they could. Finally, in 907, in a series of events reminiscent of the fall of Rome, rebels from border areas ransacked the capital, Chang'an, and killed the last emperor, a child. After several years of war, the Song Dynasty took power over a China that was smaller but more stable.

During these two dynasties, China's population grew, and grew increasingly urban and sophisticated. The entire country contained 100 million people, the most in the world and the most advanced. At least ten cities had as many people as Rome and Baghdad at their height: one million. There was also a million-man standing army for which the government bought massive amounts of food. It was the only place in the world that knew the secret of how to make silk. Some things in widespread use in China: the fine porcelain which the West still calls "china," gunpowder, the printing press, tea.

Tea began as an exotic drink, then got a popularity boost in the eighth century when Lu Yu wrote *The Book of Tea*. Just as Christianity spread on the roads in the Roman Empire, tea spread throughout China on the Silk Road, often with Buddhism. Buddhist rituals were performed in Chang'an, the end of the Silk Road, which was an international trading city. Tea was considered a cure for a wide range of ills from epilepsy to fever to lung disease to dysentery. While Arabs and Europeans looked

Food Fable

WHERE THE TEA LEAF COMES FROM

In the fifth century A.D., Boddhidarma, the monk who brought Buddhism to China, was having trouble meditating—he kept falling asleep. He just couldn't keep his eyelids open, so he tore them off and threw them on the ground. They took root and grew into tea plants.

Like all legends, this one has some truth in it. It is possible to see the shape of an eyelid in the oval of a tea leaf, and tea has caffeine, which will keep even sleepy monks awake. Tea is a member of the camellia family, a glossy-leaved bush that also produces large-bloomed flowers. Its scientific name is *Camellia sinensis* or *Camellia assamica*—camellia from China or Assam, a region in northeast India, although it probably originated in Southeast Asia in what is now Vietnam.

Tea Chronology	
3,000 B.C.	Tea consumed in China
3rd c. A.D.	Tea first appears in written Chinese
5th c.	Boddhidarma legend about sleepy monk and origins of tea
618–907	Chinese consider tea a powerful medicine and secret to long life[4]
8th c.	*The Book of Tea (Cha Ching)*, written by Lu Yuu in China
804	Japanese monk brings tea to Japan
1215	Esai, monk who brought Buddhism to Japan, writes tea treatise, *Kissa Yojoki*
16th c.	Sen Rikyu transforms tea ceremony into Japanese cultural event
16th c.	Portuguese priest writes about tea (first European account?)
1610	Dutch bring teapots to Europe
mid-18th c.	Tea is huge fashion in Russia; they invent samovar
December 16, 1773	Boston Tea Party in Massachusetts
1839–1842	Opium Wars when England forces opium on China to pay for tea
20th c.	Tea bags come into use
late 20th c.	Americans invent Mrs. Tea to make instant ice tea; no longer produced
late 20th c.	Americans consider tea a powerful medicine and secret to long life

to gold to provide the secret of eternal life, the Chinese thought tea was the key. (They might have been on to something. Scientists have recently discovered that green tea is a powerful antioxidant, a cancer-fighting agent.)

Yin and Yang

The Chinese also thought that correct balancing of *tao*, the energy force behind the universe, would lead to immortality. Like the Greek gods who had both positive and negative sides, and like the European system of humors on which it is probably based, tao has opposing components, *yin* and *yang*. Yin is female, passive, cool. Yang is male, aggressive, hot. *(Feng shui* is this principle applied to buildings and landscape.) The Chinese believed that if humans harnessed yin and yang properly, if they could find the right combination of foods, they could become immortal. To try to attain immortality, five Tang emperors in a row took "immortality drugs"—probably heavy metals—and died.[5]

China's Tang Dynasty was a time of great advances in the arts, such as poetry, but it was during the Song Dynasty, specifically between 960 and 1279, that distinctive cuisines emerged in three regions: north;

south, around the Yangtze River delta; and Szechwan. Cantonese came later. Northern Chinese cuisine was dominated by the city of Peking. Millet, meat, and dairy products were a large part of the total food consumed. Wheat was also grown and the flour used for dumplings, fried dough strips, and noodles. It was blander than southern cuisine, which was based on rice, fish, pork, vegetables, and fruits. Szechwan cuisine was also based on rice. Tea was popular, too. It was missing two foods that characterize it now, hot peppers and peanuts, because they were from the New World and had not been introduced to China yet. But even then the food was hot, seasoned with a "vegetable that resembles the pea . . . it will cause gasping and gaping."[6]

The Song period, which followed the Tang, was a time of plenty in China. As trade increased, so did the merchant class and so did their desire for new, exciting foods. In 1027, to avoid famine, the emperor ordered green lentils from India and a new strain of rice from Champa (present-day Vietnam) to be grown in southeastern China. The Champa rice matured faster so two crops could be grown in one season, and it was drought tolerant so it could grow where rice had never been grown before. Other kinds of rice were "official"—the only kind that could be used to pay taxes; glutinous rice for wine; "red rice, red lotus-seed rice, yellow keng-mi, fragrant rice, and 'old rice,' rice sold off at a discount by the official granaries."[7] However, among the upper classes, polished white rice was the standard, just as refined white bread was the standard in Europe.[8]

RICE CHRONOLOGY (*ORYZA SATIVA*)

6500 B.C.	Rice cultivated in Yangtze Valley, China
2000 B.C.	Rice in northern India and southeast Asia
300 B.C.–200 A.D.	Rice reaches Japan and the Middle East
1st c. A.D.	Rice in Indonesia and probably the Philippines
500–600 A.D.	Rice grown in Egypt
after 700	Muslims spread rice throughout Mediterranean and to West Africa
1027	Champa rice grown in China
13th c.	Rice in northern Europe
15th c.	Rice in northern Italy
1700	Rice grown in Carolinas in North America with African slave labor
c. 1900	Varieties capable of growing in colder climates are grown in Japan
1945	Jasmine rice invented in Thailand as a genetic experiment
1980s	Genetically engineered IR36 planted in more than 10% of world's rice fields

There were "Seven Necessities" that people had to have every day: "firewood, rice, oil, salt, soybean sauce, vinegar, and tea."[9] At various times, the government had monopolies on two of these, salt and tea, and also on wine. The wealthy went far beyond these mere seven necessities. The food explosion was evident in huge cities like Kaifeng and Hangzhou, which had separate markets for different foodstuffs in different parts of the city: markets for grain; two for pork; meats besides pork, like beef, venison, horse, fowl, rabbit; vegetables, including seventeen kinds of beans; fresh fish; preserved fish; fruit; oranges, and more. In butcher shops, five butchers at a time lined up at tables, cutting, slicing, and pounding cuts of meat to order.[10] The food for the imperial household was bought at its own special markets.

During the Song Dynasty upper-class diners moved from sitting on the floor to chairs. Multi-course dinners were brought to lacquered tables set with porcelain dishes and sometimes silver chopsticks and spoons. Meals were prepared by household staffs that could number in the hundreds. The emperor's kitchens had a staff of more than a thousand working under guard. For a change of pace, there were wine and tea houses, and restaurants and caterers that cooked food to order that was as good as or better than that available in the wealthiest homes. For the lower classes, there were street vendors, noodle shops, and smaller restaurants like the *taberna* and *popina* of ancient Rome that provided prepared food. Some snack shops specialized in one kind of food, like *ping*—"cakes" that were sweet or savory, stuffed or plain, steamed or fried. All of the chefs who prepared these foods were male with perhaps only a few female exceptions. If they were literate, these chefs could find recipes printed in Chinese encyclopedias and in *The Illustrated Basic Herbal*, which appeared in 1061 and contained descriptions and drawings of hundreds of foods.

State banquets were the most lavish ceremonies, with over 200 different dishes and table service of jade, pearl, silver.[11] A person's importance at a function like this was measured not just by where he sat, but also by how many courses he got. Other festivals celebrated Buddhist holidays. Ancestors were always honored at these events.

The Song Dynasty was a time of peace and prosperity in China, but the peace came at a price. China kept the barbarians at bay by paying them off with "gifts" of silver and silk. The Song split into northern and southern factions; a war between them followed. This made China vulnerable.

The Mongols: Living High on the Horse

In the thirteenth century, across the vast, dry, flat grasslands of Asia—the steppes—galloped the Mongols, led by Genghis Khan. What the Vandals and the Goths were to Ancient Rome, the Mongols were to China—barbarian invaders from the north. The Mongols' merciless tactics

terrified their enemies. They would surround a city and demand its surrender. If the city didn't surrender, they killed everyone. If the city did surrender, they killed everyone. The Mongols could ride for days, switching horses without getting off. They invented stirrups to make themselves bipedal while riding a horse, for the same survival reason early man became bipedal: it left their hands free to use weapons. They could stand up in the stirrups without falling off the horse and still be able to guide it with their knees and feet. They could also twist and shoot to the side or behind them. Standing, they were higher than the horse's head so they could shoot arrows over it.

In the process of conquering China, the Mongols changed from nomads to not just settled, but urban—quite a leap. And their food shifted from cooking to cuisine.

The nomadic Mongols were pastoral people, driving their flocks before them. They lived on dairy from their sheep and goats—milk, butter, cheese—but they were also fueled by horse-power. Their favorite food was fermented mare's milk, called *koumiss.* Unlike cow's milk, mare's milk is high in Vitamin C. When there was nothing else to drink or when they were riding and couldn't stop to rest, they drank their horse's blood. They made a slit in the horse's neck and knew just how much blood to suck without hurting the horse. Sometimes they ate horse meat. They also hunted—Siberian tigers, wolves, bears, wild boar—and usually boiled their catch, on the bone, with "seeds, grains, tubers, roots, fruits and berries, etc., even green vegetables, whatever was available." The resulting thick soup was synonymous with the Mongol word for food: *shülen.*[12]

In the thirteenth and fourteenth centuries, this changed. The Mongols shifted from cooking to cuisine. This new Mongol cuisine was like the culture: open to new ideas and techniques. The soup now had foreign spices and vegetables. As food historian Paul Buell points out, the Turks played a large part in the change to the new cuisine. The Mongols appointed Turks to important positions as government officials because the Turks were literate and among the upper classes in other cultures. The Turks had been in contact with Muslim Arabs and their cuisine, and also with Persian cuisine. They were familiar with grains, which the Mongols were not; they had many different kinds of dough—for bread, noodles, pastry—and they used the *tannur*, a freestanding clay oven. (In India, *tandoor.)* Through the Turks, many Middle Eastern foods were introduced to China. It is rare that food historians have such an easy, clear-cut indication of where foods came from, but chickpeas, ghee, and parsley were known to the Mongols respectively as "Muslim beans," "Muslim oil," and "Muslim celery." Some recipes, like sheep's head and *halwa*, are labeled "Muslim recipes."[13]

These new foods spread throughout the empire. Other foods crossed cultures, too. *Manty,* a filled dumpling which food historian Paul Buell says is "probably originally a Central Asian food" spread west to Turkey and through the Turks, beyond.

Crossing Cultures: Filled Dumplings			
Country	Name	Dough	Filling
Argentina	empanada	pastry	meat, cheese
China, south	won ton	noodle	seafood, beef, pork
China, north	bao	bread	seasoned pork
England	pasty	thick pastry	meat
Greece	spanakopita, tiropita	phyllo	spinach, cheese
India	samosa	pastry	vegetables, potato
Indonesia	sambusa	pastry	meat, vegetables
Iran	manti	yogurt pastry	meat
Italy	ravioli / calzone	noodle / bread	meat, cheese
Jewish	kreplach	noodle	meat
Korea	man-du	noodle	meat, vegetables
Mexico	enchilada	corn tortilla	meat, cheese
Morocco	b'stilla	phyllo (warqa)	chicken, eggs, almonds
Poland	kolodny	noodle	meat
Russia	pierogi	sour cream pastry	ground beef
Tibet	momo	noodle	meat, vegetables
Turkey	manti / börek	noodle	lamb, beef
U.S.	dumpling	sweet pastry	sweetened fruit
Uzbekistan	manti	noodle	lamb

Genghis Khan's grandson, Kublai Khan, ruled from 1260 to 1294 from the new capital he created in Beijing (formerly Peking). He called his dynasty Yuan, which means "beginning." Kublai Khan ruled the largest land-based empire the world has ever seen—west into India and Poland and east to Korea. He decided to extend it farther. Kublai Khan sent messengers to Japan, demanding that they pay tribute to him—in effect, admit they were inferior, submit to his rule, and give him money. He expected Japan to submit, as all the other countries had. But the Mongols were in for a surprise.

Cipango: Japan

China and Japan—which the Europeans at that time called Cipango—are linked by location. Huge China, wealthy in natural resources and food, lies west of the much smaller Japan, an island country with no natural resources except water and people. Like Greece, most of Japan's land is mountains which contain no mineral wealth. Like California and the rest

of the Pacific Rim, it lies on an earthquake fault and has volcanoes. So Japan had to either trade with or conquer other countries to meet the basic needs of its population. Many of Japan's foods—but not its cuisine—and much of its culture, such as art, religion, and pictographic writing, originated in China. The diets of both countries rely on rice. Rice was cultivated in China about 8,500 years ago, but did not reach Japan until between 300 B.C. and A.D. 200. Japanese rice—*japonica*—is short-grained and "glutinous," which really means sticky, because there is no gluten in rice.

In A.D. 804, a Japanese monk brought tea back from China. In 815, he introduced it to the emperor, and that began the tea tradition in Japan. The first treatise on tea, *Kissa Yojoki*, was published in Japan in 1215, the year the Magna Carta was signed in England and the pope declared that communion wafers were the literal body of Christ. The treatise was written by Esai, the monk who also introduced Zen Buddhism to Japan. The Way of Tea stated that there were four values connected to tea practice: reverence, respect, purity, and tranquillity. However, the rituals associated with tea at this time in Japan had little to do with religion. As a new fashion from China, it caught on among the upper classes. Bored nobles dressed in their finest satin and brocade and went to tea houses to play games: who could taste a tea and guess its exact place of origin? Then they bet on the outcome and handed out hundreds of prizes like bags of gold to the winners. Tea purists objected to this deviation from the Way of Tea. They got the tea games banned. But the games were too popular; finally, the ban went and the games stayed. It would be centuries before the Japanese tea ceremony returned to its roots and found its form.

Japan refers to itself as the "Land of the Rising Sun," which is depicted as a huge red ball on its flag. It is a culture of intense extremes. On one hand, there is great attention to detail and the creation of beauty. An example is a simple activity elevated to art, like drinking tea. On the other hand, there is a violent warrior mentality. In her famous book about Japan, anthropologist Ruth Benedict describes this split as "The Chrysanthemum and the Sword." In Japan, knights in the Middle Ages were called *samurai*. These warriors followed the code of *bushido*, similar to the code of European knights: they were brave and loyal and willing to die for their earthly lord. But a samurai would never surrender. If he did, he would have to kill himself to save his honor or his entire family would be disgraced, so it was more honorable to die in battle. Samurai swords were large and deadly; the same skills make Japanese kitchen knives some of the best in the world today.

Mongol Versus Samurai

It was into this samurai warrior culture that Kublai Khan sent his messengers, demanding that Japan submit to Mongol rule. The Japanese ignored him for ten years. In 1274, the Mongols invaded Japan, but a

storm drove them back. Kublai Khan sent more messengers. The samurai chopped their heads off. In 1281, the Mongols invaded Japan again. A storm scattered the fleet; great waves sank the ships. The Japanese believed that their gods had saved them by sending a divine wind—*kamikaze* (kah mi KAH zee). They used the same word at the end of World War II to describe their suicide pilots who dive-bombed American ships. The Mongols did not try to invade Japan again.

EUROPE

The Little Ice Age

The Medieval Warm Period in Europe was followed by the Little Ice Age, a period of cooling from about 1300 until about 100 years ago. The temperature change wasn't dramatic, perhaps one to one and a half degrees Centigrade cooler than today. However, the impact on agriculture and shipping ranged from serious to disastrous. Glaciers crept down into valleys, obliterating farms. In some places the land disappeared—the topsoil literally washed away, down to rock. The growing season became shorter, food grew scarcer. Wheat did not grow and ripen normally, could not be dried, and rotted. Grapes covered with mildew made sour wine or none. In England, the temperature drop was enough that grapes could no longer be grown at all. It destroyed a commercial wine industry that was so good France was trying to pass laws to keep British wines out. When the vines died, northern Europeans turned to alcohol brewed from grain: beer, whiskey, vodka. Fewer ships sailed the seas because of dangerous ice floes, which also kept them from sailing close to shore. Greenland, colonized by Denmark hundreds of years earlier, the oldest colony of any European country, was isolated by the climate change. The European Greenlanders could have learned much from the native people, the Inuit (formerly called Eskimos), about how to survive and where to get food in the increasingly cold environment. But the Europeans considered themselves civilized and regarded the Inuit, who were not Christian, as uncivilized, and refused to associate with them. Unable to overcome their cultural prejudices, unsupplied by Europe and unequipped for Greenland, the Europeans starved to death; the colony disappeared.[14]

In Europe, hungry people left the land and wandered homeless into the cities, begging for food or stealing it. Thousands died and were left to rot, buried in mass graves, or eaten. The living, suffering from deficiency diseases like anemia, their bodies bloated from lack of protein, were too weak to work, to farm or to cook. Animals suffered from malnutrition, too. This human and animal malnutrition was passed into the next generation in the form of sickly babies. Their weakened state made them prone to intestinal parasites, diarrhea, and deadly diseases.

CHRONOLOGY—FAMINES AND ERGOTISM EPIDEMICS, 750–1800			
When	Number	What	Where
750–800	6	Famine	Throughout Europe
800–900	12	Famine	Throughout Europe
900–950	3	Famine	Throughout Europe
900–1000	Frequent	Ergotism	Throughout Europe
1000–1100	8	Famine	Throughout Europe
1000–1100	26	Famine	France
1000–1100, esp. 1042, 1076, 1089, 1094	Frequent	Ergotism	Throughout Europe
1250	Period of relative prosperity		
1315–1317		Worst famine of Middle Ages[15]	Throughout Europe
1348–1350	BUBONIC PLAGUE—BLACK DEATH		
1556–1557		Famine	Throughout Europe
1590–1593		Famine	Throughout Europe
1630, 1648, 1652–1654, 1660s, 1680–1685, 1693–1695	Frequent	Famine	Throughout Europe
1700–1800	16	Famine	France (1789–Revolution)

Plague—The Black Death, 1348–1350

The newly re-opened trade routes to Asia brought more than silk and spices to Europe. In 1348, rats covered with fleas spread plague quickly by land and by sea, aided by poor nutrition and the absence of personal hygiene and public sanitation. In two years the plague killed one-third of the population of Europe, about twenty-five million people. Another four million died in Southwest Asia; in China the death toll was thirty-five million. A vicious cycle began. With farmers dead and much of the surviving population weakened, famine followed plague. Then malnourished people were susceptible to disease. Within 100 years, the population of Europe had dropped drastically.

Some people tried to escape the plague by running away from the cities. *The Decameron* by Giovanni Boccaccio is a series of stories about young Italians hiding out at a villa in the hills above Tuscany, where they make up stories to pass the time. One is a fantasy about a place called Bengodi, a paradise for people who love food: it is built on a mountain of grated Parmesan cheese, and the vines drip sausages. People who have nothing else to do all day make macaroni and ravioli and cook them in capon broth. There is an endless supply of food because as fast

as it gets eaten, more gets made. And through it all runs a stream of white wine.[16]

People who could not escape the cities did what they could to fight the plague. They wandered from town to town, whipping themselves to atone for whatever humans had done to anger God and bring such horror on the world. Others just got drunk and had orgies. Many believed that the plague was caused by foul-smelling vapors coming from swamps, so they made pungent or sweet-smelling pomander balls using herbs like rue and flowers like columbine and marigold, the only things available to them. These of course proved useless.[17] (Now, tetracycline kills plague quickly and easily.)

European Population Before and After the Black Death[18] (in millions, approximate)

Country/Area	Population in 1340	Population in 1450
Eastern Europe	13.0	9.5
Italy	10.0	7.5
France and the Low Countries	19.0	12.0
Germany and Scandinavia	11.5	7.5
Iberian Peninsula	9.0	7.0
Total	62.5	43.5

In an age when nothing about germs was understood, blame had to lie elsewhere. Rumors sprang up that the Jews were poisoning the wells in a plot to kill Christians. The solution: kill Jews. And they did, with a vengeance. As a result of these attacks, a great Jewish migration began from the more heavily populated cities of western Europe to the less populated areas of eastern Europe. The Jews felt they would be safe there, especially in Poland. They were relatively safe for 600 years, until the middle of the twentieth century when a small town in southern Poland called Oświęcim became known to the world by its German name: Auschwitz.

The severe drop in population caused massive changes in European life. With people in crucial occupations dead, those left alive could command higher wages. Since whatever they produced—bread, barrels, or wagons—was also in short supply, they could also charge higher prices. One of the long-lasting effects of the plague was that the populations on the sugar-producing islands like Cyprus and Sicily were severely reduced and slow to increase, so sugar production dropped. It was centuries before sugar production rose to its old levels again, and it would not be in the Mediterranean, but on islands halfway around the world in what came to be called the West Indies—the Caribbean. In some places

in Europe, there was chaos. If all the members of a noble landowning family were dead, there was no one left to inherit their land legally. Squatters moved in and fought over it. Serfs fled to the cities as they had after the Crusades. And like the Crusades, the plague, too, weakened the Church because it couldn't explain what was happening or stop it. People in cities began to ignore the Church's prohibition on doing business and just went and did it anyway. They became very wealthy, especially in Italy.

Italy: The Renaissance

Almost 1,000 years after the fall of the Roman Empire, Italians rediscovered the art and architecture and cuisine of the classical Greeks and Romans literally in their own backyards in broken statues, pots, buildings, and in ancient writings. The Renaissance—"rebirth"—of civilization began in Italy in the fourteenth century. It is important to remember that in the fourteenth century, "Italy" meant a geographic area, not a unified country. That didn't happen until the nineteenth century. Until then, the Italian peninsula was occupied by independent city-states, some of which were conquered at various times by Muslims, Spain, France, and other countries. The Renaissance was characterized by an increase in trade and in learning, with an emphasis on humanism—the importance of the individual, as opposed to the Church or the state. Famous artists of the Renaissance were Michelangelo, Leonardo, Raphael, and Donatello (before they were Ninja Turtles).

Italians rediscovered the cuisine of ancient Rome in 1457 when the Vatican library acquired a manuscript attributed to Apicius. Along with an interest in Roman cooking came a revival of Roman excesses. In the sixteenth century, Italy was wealthy and powerful, at the height of the European world. And the Medici family was at the height of power in the wealthiest, most powerful city-state in Italy, Florence. They had accumulated wealth by being merchants, the middlemen between Arab traders in the east and Europe in the west. They had so much money they started loaning it out and became the bankers of Europe, with branches in major cities like Antwerp, Belgium. The Medici were the new royalty, although they began as what the French called *bourgeoisie* and the Germans called *burghers*: not born nobles, but merchant-class city dwellers. This new class of people had money and they wanted to show it off. Fashion and food were two ways. They dressed in layers, all for show: dresses, stockings, shoes, jackets, in great quantities of expensive fabrics like silk, satin, and velvet. Their hair was done into elaborate shapes, increased with fake silk hair and topped with fancy hats in more expensive fabrics and feathers and fur. They used make-up and perfume, and wore jewelry on everything from their hair to their extravagant shoes.

With the growth of cities came an urban population that did not produce its own food. It needed food that was preserved, and for that it needed spices and salt. Food historian Flandrin stated it clearly: "At no time in European history did spices play as great a role as in the fourteenth, fifteenth, and sixteenth centuries."[19]

Food Fable

SPICES AND ROTTEN MEAT

Let's put this one to rest for all time. In the Middle Ages and the Renaissance, people did not use spices to mask the taste of meat that had gone bad. The class of people who could afford spices could also afford meat, which was butchered fresh daily, and the laws concerning meat were strict. None of the cookbooks—not in England, France, the Netherlands, Italy, or Spain—talk about what to do with meat that was going bad or "high," or about using spices in this way.[20]

The medieval theory of the humors was partly responsible for the spice increase, because now there were more people in classes that could afford them. But which spices were used changed. French upper-class cooking began to consider spices like black pepper unrefined and lower-class. Each class had its own food habits. "Delicate" meats like partridges became increasingly important to the upper classes, who thought they increased intelligence and sensitivity, and that spices made them easier to digest. Cooking "correctly" could mean cooking "with correctives"—opposing elements to counteract an unfavorable humor. For example, oysters, extremely cold and wet, could be "fixed" by roasting them with spices.[21] At the same time, bread occupied a larger percentage of the diet and budget of the lower classes, which might spend more than half of their income on bread.[22] The breadbasket of Europe was Poland, and Ukraine in the east, which meant the grain had to be shipped, which created another wealthy class of shippers. The lower classes sent their children, as early as age seven or eight, out to be servants in the homes of the new wealthy classes.[23]

Germany: The First Printing Press

In 1454, a quiet revolution occurred in the world. A German named Johannes Gutenberg invented the printing press. The Chinese had invented moveable type centuries earlier but hadn't pursued it because it didn't work very well with their pictographic alphabet of thousands of characters. It worked very well for European languages, which had few letters.

The first book Gutenberg printed, in 1454, was the Bible. A few of these extremely rare and valuable books still exist. There are several in the United States, including one at the Library of Congress in Washington, D.C. Shortly after the Bible was printed, so were books for learned men concerned with their health, and looking, of course, for immortality.

Italy: The First Printed Cookbook

The first printing press arrived in Italy in 1465; in 1474, *De Honesta Voluptate et Valetudine*—"Of Honest Indulgence and Good Health"—was printed in Rome.[24] This combination medical manual and life advice book also included recipes, which makes it the first printed cookbook.[25] Written in Latin by an Italian named Bartolomeo Platina, it was translated into Italian in 1487, into French in 1505, and into English in 1967.[26] Apicius and the customs of ancient Rome influenced Platina's book because he was the Vatican librarian—a new position created by the profusion of books created by the printing press—and since 1457, the Vatican had owned the writings of Apicius. As historian Luigi Ballerini has pointed out, most of Platina's recipes were really written by Martino, an Italian from northern Italy, chef to a cardinal who liked to live very well and threw dinner parties that turned into orgies. Earlier in the fifteenth century, Martino had written, in Italian, the 250 recipes that appeared in *De Honesta Voluptate*. Platina acknowledged Martino's contribution. Before copyright laws, this kind of "borrowing" of other people's work was common.

One of the areas that Platina singled out as excelling in Lenten confections was the province of Catalonia on the Mediterranean Sea at the Spanish-French border. The cuisine and language of this area were connected directly to ancient Rome and to Latin.[27] The Arab influence is visible, too, in the meat and fruit stews, in the use of spinach and melons, and in the orchards of stone fruits—peaches, cherries, apricots.[28] The Arabs also introduced sugar, saffron, rice, and the bitter orange—also called the blood orange because of its dark red color or Seville orange after the city in Spain—to this region of Spain.

The new interest in wealth and indulging the pleasures of the flesh, including lavish Roman banquets, extended to the clergy. Popes and cardinals employed party planners called chamberlains to arrange spectacles and feasts, and chefs to carry out their every wish. One pope had a lavish public wedding and banquet for his daughter and built a huge bull that was a wine-gushing fountain for his own coronation. (What's wrong with that sentence? Hint: Catholic clergy are not only forbidden to marry, they are also supposed to be celibate—no sex.) Others became wealthy by selling pardons, called "indulgences," even to rapists and murderers. No sin was too horrible to keep a sinner out of heaven if he had enough gold. One cardinal who became wealthy selling indulgences justified his behavior: "It is not God's wish that a sinner should die, but

that he should live—and pay."[29] Ordinary pious people protested; reform movements arose. One was led by Savonarola, a monk in Florence, who urged people to return to the teachings of Christ and lead holy lives. He was burned at the stake for criticizing the Church. It was clear that any movement to change the Church would have to come from somewhere that was not in the pope's backyard.

The Age of Exploration

Europeans wanted spices, but they wanted them cheaper. The spice trade was controlled at its origins thousands of miles away by Chinese, Indians, and other Asians, Persians, and Arabs. The spice markets in Europe were controlled by Italians, especially the Medici family in Florence, and the city-state of Venice in northeastern Italy. What Europeans wanted was a sea route that was a shortcut, that cut out the Arab and Italian middlemen and drove down the prices. It would be worth a fortune to the man who discovered it and to the country that paid for it.

In the beginning of the fifteenth century, Europe's westernmost country took the lead in exploring new routes to find spices. Portugal's Prince Henry the Navigator set up a sailing school. Just as three important technological developments—the wheel, the plow, and the sail—had helped the Sumerians trade 4,500 years earlier, three new technological developments helped the Europeans. The magnetic compass, invented by the Chinese, always pointed north and helped ships' captains get their bearings on the open sea; the astrolabe, an Arab invention, made navigation using the stars possible; and the new triangular sails allowed ships to sail against the wind, not just with it. The Portuguese were the first Europeans to sail south down the west coast of Africa, around the Cape of Good Hope, and up the east coast of Africa.

The Chinese were also looking for a shorter alternative to the Silk Road caravans that took years to make the profitable trip to the Middle East and the Mediterranean. They sought a sea route. From 1405 to 1433, China sent Admiral Zheng He on seven voyages. He explored the South Pacific and reached the Persian Gulf and Africa. The 300-ship fleet must have been an impressive sight, nine-masted ships 400 feet long, flying red silk sails. They could have kept on going all the way to America, but they stopped. A shift in political power forced the great fleet to retire. The conservative Confucian scholars who were running China didn't want the country to be "polluted" by engaging in business with foreigners, or any business at all. They declared it illegal to build a ship with more than two masts, which made long-distance voyages impossible. Then they taxed businesses and gave tax breaks to farmers to discourage business and encourage farming. At the same time that the Catholic Church in Europe was loosening its restrictions on engaging in business, China was tightening them. It was a decision that would pro-

tect and strengthen China in the short run, but prove harmful and make it vulnerable in the long run. Its merchant class left; many went to Indonesia. For the next 400 years, wealthy, self-sufficient China closed itself off from the world, disdaining to do business with the West. During that time, the West made technological advances that would completely overwhelm China. The next time Europeans came knocking on China's door, they would be carrying new technology made possible by a Chinese invention: guns.

Turkey: The Fall of the Eastern Roman Empire and the Rise of the Ottoman Empire

In 1453, after three and a half centuries of trying, Ottoman Turks, Muslim warriors, finally succeeded in conquering Constantinople. Their leader, Sultan Mehmed, renamed the city Istanbul and converted the churches to mosques. The Eastern Roman Empire had fallen. Like the ancient Trojans, the Turks controlled the eastern Mediterranean Sea and trade coming into it from Asia—including the spice routes. Now there was real urgency to finding another way to get spices. Over the next century, the Ottomans, a military society based on slavery, expanded their empire to the eastern Mediterranean, north Africa west to Algeria, and Europe into what is now Hungary. They were stopped more than once from conquering Vienna in Austria.

Mehmed began to build the Topkapi Palace, and its enormous kitchen. Following sultans added ten more kitchen sections. Turkish cuisine is elaborate and specialized. Although Istanbul is in Europe, the rest of Turkey—the Anatolian Plain—is in Asia, and the Byzantine Empire was Greek-influenced. Turkish pocket bread, called pita in other parts of the Middle East, is *pide;* other staples are yogurt, a Turkish invention used in soup and sauce; meat kebabs and rice pilaf; *dolmas*—stuffed vegetables; *manti* (filled savory dumplings); and *börek* (filled savory pastry). The flat bread called *lavaş* (lavash) is baked in a *tandir*, a clay-lined pit related to the *tannur* of Persia and the tandoor of India. There was a separate building for *helva* (or *halvah*), a confection made of nuts—as paste, chopped, or whole—and sometimes dried fruit.[30] (The halvah Americans know is made from sesame.) By the eighteenth century, "each of six varieties of helva was assigned to a separate master chef, with a hundred apprentices working under him."[31] The palace kitchens had to feed sometimes 10,000 people each day, much of it meat: in 1723, "30,000 head of beef, 60,000 of mutton, 20,000 of veal, 10,000 of kid, 200,000 fowl, 100,000 pigeons, and 3,000 turkeys."[32] They also made trays of baklava for the military on the fifteenth day of Ramadan. Like France's King Louis XIV, Sultan Mehmed was above dining with anyone.

The Spice Bazaar that is famous in Istanbul today did not begin until the middle of the seventeenth century. But the Ottomans gave their

name to the low, round, padded stool that has revived in the twenty-first century as a combination seat/coffee table.

While the Portuguese sailed east searching for spices, some Europeans thought that going west would be the fastest route to the Indies. Almost exactly 200 years after Marco Polo published his memoirs, another Italian read his stories, believed them, and was inspired to look west for that shortcut. He was known to the Italians in Genoa where he was born as Cristoforo Colombo, to the Spanish who financed his expedition as Cristóbal Colón, and to the English as Christopher Columbus. He was an experienced sea captain who was familiar with maps of the world. They had three continents—Europe, Asia, and Africa. At the center of the map was Jerusalem—the Christian Holy Land.

But in Germany, a man named Behaim was building a globe, a round world.[33] Columbus trusted his own observations that the horizon never got closer no matter how long he sailed toward it, and that he was not going to fall off the Earth.

Columbus was petitioning the royalty of Europe to finance his trip to look for spices in the east by sailing west, but he wasn't having much success. The Medici weren't interested because if he did find a new route, it would cut out their moneymaking position as middlemen. The situation in Spain was tense, as the new king and queen revived the Inquisition as part of their campaign to purify Spain and save its soul.

Spain: The Inquisition and Jewish Cooking

In 1474, the same year that Platina published the first printed cookbook, King Ferdinand and Queen Isabella began their reign. Ferdinand was king of Aragon, and Isabella was queen of Castile, the wealthier, more powerful part of Spain. Their marriage in 1469 unified Spain for the first time. In response to the wave of panic that surged through Europe after the fall of Constantinople to the Muslim Turks in 1453, Ferdinand and Isabella decided to reclaim their country for Christianity—a unified and purified Spain. To achieve this reconquering or *Reconquista,* they had to cleanse the country of two segments of the population that had been living there peacefully for hundreds of years, the Islamic Moors from northern Africa, and the Jews. There were already laws against Jews in place. In 1412, Spain had passed laws that forbade Jews to work at certain trades, including grocer and butcher. They could not employ Christians; eat, drink, bathe with, or talk to Christians; and they had to wear only coarse clothes.[34] In 1476, by law Jews had to wear a distinctive symbol. In 1480, the king and queen reconvened the Inquisition. In 1484, Jews were not allowed to sell food. By 1492, the Spanish had driven the last of the Moors out of the country after the battle for the city of Granada, and they had issued an order that all Jews must be baptized Christian or leave the country. The Spanish waged war against the

Moors, but they used food to get rid of the Jews. The Inquisition knew that it was possible for people to hide their religious books and lie about their beliefs, but it was impossible for them to hide their food customs.

The Inquisition, under Torquemada, its famous leader whose name has become synonymous with torture, was very thorough and very specific. They went from town to town, called all the people together in the town square—the *plaza*—and announced what they were looking for: anyone who cooked food on Friday night but didn't eat it until Saturday, because Jews didn't cook on Saturday, their sabbath; anyone who didn't eat pork; anyone who washed blood off meat before they cooked it; anyone who ate foods the Church had forbidden during Lent, like cheese. Disgruntled servants turned in masters and mistresses; neighbors betrayed neighbors. People who were found guilty were marched through the streets to the plaza, then burned at the stake over a slow, agonizing fire, as a lesson to others to be good Christians or they would burn in the fires of hell. Some Jews "passed" for Christian by pretending to eat like Christians. They made a great show of cooking pork and sharing it with their neighbors; perhaps the neighbors were so overwhelmed by the generosity that they didn't notice that the people who cooked the pork didn't eat any themselves.

Even conversion wasn't a guarantee of safety. Eventually, the Inquisition went after the *conversos*, Jews whose families had converted to Christianity generations earlier but who the Inquisition felt might still be practicing Judaism secretly. In order to survive, the Jews left Spain. Some went west to Portugal, but a great many went much farther away from the Inquisition and from Catholicism altogether: they went north to the only country in Europe that practiced religious toleration, the Netherlands. They took their knowledge of banking and business with them. Ferdinand and Isabella were aware of the economic and intellectual drain on their country but insisted that they had to persevere with their religious cleansing to save the souls of the Christians in Spain.

Waiting to see Queen Isabella was Christopher Columbus, and waiting for Columbus were two new continents, North and South America, and unimaginable mineral, vegetable, and animal wealth. There was nothing in the teachings of the Catholic Church, nothing in the writings of the ancient philosophers, nothing in their scholarly literature or popular folklore or fables to prepare Europeans for the amazing world they were about to encounter.

THE AMERICAN EMPIRES

Before Columbus arrived in 1492, not one person in North or South America had ever had the common cold. No one had ever gotten measles or been scarred by smallpox. No one had ever suffered through those

great child killer diseases, diphtheria and whooping cough, against which everyone in the United States is vaccinated now shortly after birth; nor had they ever had mosquito-borne malaria, or typhus, which is spread by lice. Those diseases didn't exist in the western hemisphere. There were also no weeds like crabgrass and dandelion and kudzu. There were no black rats, no brown rats. American bees buzzed and made honey but they had no stingers.

The people native to North and South America had arrived between 40,000 B.C. and 12,000 B.C. by walking across the Bering Strait between northern Asia and Alaska when the glaciers receded and dried up the Bering Sea, creating a land bridge. These people, relatives of the Mongols, spread from Alaska down to Tierra del Fuego at the tip of South America. They became the Eskimo, who ate seal meat; the Kwakiutl, who carved totem poles; the Maliwoo, who lived a laid-back life on the Pacific Ocean at what is now Malibu; the Iroquois, who had a sophisticated system of government; and many other tribes.

Before Columbus arrived, North America, South America, and Central America each had one dominant culture: the inhabitants of Cahokia, located near present-day St. Louis on the Mississippi River; the Inca, in their capital city of Cuzco, in the Andes Mountains of Peru; and the Aztec, whose great capital city, Tenochtitlan, was built on landfill in a lake where Mexico City rises now. Although these three cultures were thousands of miles apart, they had several things in common. All were at the center of complex trade routes. Cahokia used the Mississippi River and its thousands of miles of tributaries for transportation and trade, including the Ohio and Missouri rivers. The Inca and Aztec built roads. All three civilizations built enormous pyramids, some larger than the pyramids of Egypt. But none of these three civilizations used the wheel except as a child's toy or in games. Everything on these trade routes was carried on boats or on the backs or heads of people or on pack animals, like the llamas domesticated by the Incas. They didn't have carts because they didn't have strong animals—draft animals—to pull them. There were no oxen, a prehistoric horse had become extinct, and the animals native to the Americas couldn't be domesticated easily or at all: polar, grizzly, brown, and black bears; jaguars, lynxes, and wolves. Although there were few domesticated animals, the Agricultural Revolution had taken place independently in the Americas. The American civilizations had developed new ways of farming and preserving to deal with foods that were beyond the wildest dreams of the people in Europe, Africa, and Asia.

North America: Cahokia, the Mississippian Civilization

In pre-Columbian America, Cahokia, a great city of pyramids, rose from the flat lands on the banks of the Mississippi River, just east of where

St. Louis is now. More than 100 pyramids, aligned with the rising and setting sun and various constellations, spread out over six square miles. Animal images appear on bowls and shells, especially the water spider, which some tribes, like the Cherokee, believed brought fire to humans. Other animals represented are fish, deer, rabbits, raccoons, falcons, snakes, eagles, and frogs.[35] Cahokia reached its peak in the 1100s, when its population was about 20,000. Human remains have been found which indicate that the Cahokians practiced human sacrifice. Little is known about the civilization at Cahokia, because historians believe that the entire city was wiped out by European diseases that spread from the Spanish in Mexico into the interior of North America. By the time Americans reached the Mississippi River in the eighteenth century, Cahokia was a ghost town long gone.

South America: Inca—Potato and Maize

The Inca Empire was the largest empire in the Americas. Its 2,500 miles of territory stretched along the Pacific coast of South America from the present-day countries of Ecuador at the equator (which is what *Ecuador* means), south through Peru, Bolivia, and western Argentina to approximately where Santiago, the capital of Chile, is now. This is a territory of geographical extremes. From desert at the Pacific Ocean in the west, the land rises steeply almost 20,000 feet to the snow-covered peaks of the Andes Mountains. The Altiplano (high plain) sits thousands of feet up in the Andes between two parallel mountain ranges. Like the ancient Romans, the Inca built roads and bridges—14,000 miles of them—to connect their empire. Just as in the Roman Empire all roads led to Rome, in the Inca Empire all roads led to the capital of Cuzco in what is now Peru, 11,444 feet above sea level. Like the Egyptians, the Inca mummified their dead. They worshiped Inti, the god of the Sun, at their most sacred shrine, the Temple of the Sun in Cuzco. They were highly skilled at working with the material they called "the sweat of the sun"—gold. In Cuzco, the walls of buildings were covered in sheets of gold. The Inca also constructed a mysterious city one and one-half miles up in the Andes. Called Machu Picchu, it could be reached only by walking over a log bridge with a steep drop below, and is so remote that it wasn't discovered until 1912. Archaeologists are still trying to figure out what the Inca used it for.

There was no private ownership of land in the Inca Empire. The government controlled land and the economy and decided which crops would be grown where. Under government direction, farmers built irrigation systems and terraced the hillsides where they grew quinoa, a grain native to the Andes. Inca meats included deer and an animal called a *vizcacha*, which had a body like a rabbit and a tail like a fox. Our "jerky," comes from the Inca practice of leaving meat out to dry in the



Machu Picchu. *Photo by Juanita Lewis*

desert air and their word for it—*charque*.[36] The difference is that their *charque* was made from llama meat, while ours is more likely to be beef or turkey. Dried fish fed the army. Another food staple for a majority of the population then, and now, was *cuy*—guinea pig (*Cavia porcellus*)—

Culinary Confusion

CORN AND MAIZE

The word *corn* was first used to describe any grain, even of salt, as in corned beef. It also means the "small, hard seed or fruit of a plant," as in peppercorn.[37] So when pre-Columbian Old World writings mention corn, they can mean many things, but maize is not one of them. The word *maize* came from the Spanish, who picked it up from the Arawak Indians of the Caribbean, where *mahiz* means "stuff of life."[38] Maize was domesticated in central Mexico by about 3400 B.C. It quickly became the basic crop and spread north to the cliff dwellers in the American Southwest and to Cahokia, and south to the Inca Empire.[39]

which the Inca had domesticated by 2000 B.C. The taste has been described like fishy pork. The *cuy* is a small mammal that reproduces rapidly. It is roasted whole, hair off, skin on, seasoned with chile, gutted, and the cavity filled with hot stones.[40]

The Inca also cultivated more than 3,000 varieties of potato (*Solanum tuberosum*), which they domesticated between 3700 and 3000 B.C.[41] They preserved the potatoes by freeze-drying. Since they were in the Altiplano, a desert at high elevations, the weather was hot and dry during the day and freezing at night. During the day, they squeezed the moisture out of the potatoes with their feet, like crushing grapes for wine, and left them out to dry. Then the dry potatoes froze at night. The freeze-dried potatoes, called *chuño*, could be stored indefinitely in

RECIPE:

Chicha–Corn Beer

The method of making *chicha* is this: "women . . . put [the sprouted corn] into their mouths and gradually chew it; then with an effort they almost cough it out upon a leaf or platter and throw it into the jar with [ground corn and water]." Later it is boiled and strained. In *The Story of Corn*, Betty Fussell says that *chicha* has "a two-inch head of foam and . . . tastes a bit like English barley water mixed with light pilsner."[42]

huge warehouses in case there was a shortage.[43] Water was warehoused, too.

Corn, which traveled south from Mexico, was another staple of the Inca diet. To Americans, corn means corn on the cob, with kernels. But the word was in use in Europe long before there was corn on the cob. This has led to some confusion, especially with ancient texts.

There is further confusion. As food historian Raymond Sokolov points out, "The corn of the Andes [*choclo*] is not our corn. The kernels are much bigger, the taste and texture different."[44] And it was used differently, transformed by a unique technique, into a beer called *chicha*.

Tomatoes and chile peppers were native to Peru, too. Just as corn migrated south to Peru, tomatoes and chile peppers migrated north to Mexico, where they were domesticated and bred and where Europeans first encountered them.[45]

Central America: Aztec—Cacahuatl (Chocolate)

In 1325, a people called the Mexica arrived at a valley 7,000 feet above sea level and ringed by mountains—the site of present-day Mexico City. They built their capital city, Tenochtitlan, on an island in the middle of one of the lakes on the valley floor. As they grew more powerful and dominant over Central America, Aztec engineers connected Tenochtitlan to land by roads built above the water.

Like the Inca to the south, the Aztecs worshiped a sun god. But the Aztec god, Huitzilopochtli, demanded human sacrifice every day or he would not appear. Those sacrificed were captured from among neighboring tribes which, understandably, hated the Aztecs. Those sacrificed were forced to climb many steps up a pyramid to an altar on the flat top. While they were alive, their hearts were cut out, still beating, and offered to the god. The rest of the body was tossed down the pyramid steps, ritually divided, stewed with maize and salt, and eaten. Sophie Coe puts the portions of human flesh at about one-half ounce per person and says that some people declined to eat it. She also points out that the absence of the Aztec staple spice, chile, clearly indicates that this was not an ordinary meal, but a ritual one. Her point is that cannibalism was connected to religion and strictly controlled. It was not a random occurrence when somebody got hungry.[46]

In addition to the sun god, the Aztecs also worshiped the god of fire who lived among three other gods, represented by three stones on the hearth where all the cooking was done. Much of today's Mexican cooking equipment and the food cooked on it are directly descended from the Aztecs. Tortillas were cooked on a clay griddle called a *comalli* (today, *comal*); corn was ground on a *metate*, a three-legged grinding stone,

with the Aztec equivalent of the pestle, a stone that fit in the hand and was therefore called a *mano*. In the Aztec civilization, women were usually the cooks. Mothers taught daughters, and by the time a girl was thirteen she was expected to be an accomplished cook. The exception was that men handled the barbecue.

There was an upside and a downside to being a cook for nobility in a culture that practiced human sacrifice. The upside: you were employed in a wealthy household, so you had food. The higher the noble person's rank, the greater the number of cooks. The downside: when the nobility died, they needed their chefs to cook for them in the afterlife. The serious downside: the nobles were buried dead but the cooks were buried alive.[47]

As with other cultures, religious festivals played a large part in Aztec life. There were fast days and feast days, when several provinces got together and each was required to provide the food on a certain day. But as Sophie Coe points out in *America's First Cuisines,* it is still unclear how many times a day the Aztecs ate. Many sources say two, others say three—at dawn, 9:00 a.m., and 3:00 p.m.[48]

One of the most important foodstuffs, which had more than culinary significance in the Aztec culture, was chocolate—*Theobroma*, which means food of the gods. It was the beverage of Aztec emperors and warriors. They drank it lukewarm, frothed on top the same way it is done today, by rubbing a swizzle stick or *molinillo* between the palms of the hands. In their book *The True History of Chocolate*, Sophie and Michael Coe discuss at length how the Aztecs flavored chocolate. They used finely ground chile powder, or sometimes maize, honey (there was no sugar yet), a flower related to the custard-apple, another flower related to black pepper, and "black flower"—what they called vanilla because of the color of the pod.[49] Even though the Aztecs had an alcoholic beverage made from agave, they didn't consider it fit for men to drink. Old people could drink it, but chocolate was the drink preferred by nobles and warriors and restricted to them. It was part of a warrior's food ration, along with tortillas, beans, dried chiles, and toasted maize.[50] Besides, drunkenness was punishable by death. However, chocolate was not consumed indiscriminately. It was served as a ritual beverage after a banquet, by itself, along with tobacco to smoke, in a male bonding ritual that echoes the Greek symposium, where the men drank wine after the meal.

The cacao beans were stored in the public granaries, along with maize, but they were much more than food. They were also money in the Aztec Empire. They could be used to pay wages and to purchase items. A turkey hen or a rabbit cost 100 cacao beans, an avocado cost three, a large tomato cost one.[51] But cacao, like other forms of money, could be counterfeited.

Protein in the Aztec diet came from "deer, peccary, rabbits, jackrabbits, mice, armadillos, snakes, gophers, opposums, and iguanas" that were caught, kept in cages, and fattened up. There were dogs in the Americas, but they were not like modern dogs or the ferocious armored war dogs the Spaniards brought with them. The American dogs were small and soft, like a little rolled roast with feet. They were bred and raised for food, probably fed mostly maize, along with avocados and other vegetables.[52] Also on the Aztec menu were foods from the surrounding lakes: water bugs and their eggs, frogs and tadpoles, lake shrimp, and larvae of the *Comadia redtenbacheri* worm that today resides at the bottom of the mezcal bottle.[53] These were cooked in a variety of ways: ground up into balls, roasted and salted, and cooked in maize husks like tamales. The Spaniards found them palatable; they said the water bug eggs tasted like caviar. One lake food the Spanish could not bring themselves to eat was a plant the Aztec called *tecuilatl*—edible seaweed (*Spirulina geitleri*). It was partially sun-dried, formed into cakes, then completely sun-dried, and used to make tortillas. Supposedly, it tasted like cheese "but less pleasing and with a certain taste of mud."[54]

Most of this culture of corn, squash, beans, and chiles traveled north on the trade routes from the great Aztec civilization into what is now northern Mexico and the southwestern United States.

The Southwest: Three Sisters and Chile Man

In southwestern America, on the edge of the Aztec trade route, efficient native people built communal dwellings, like apartment houses. The largest had perhaps 600 rooms and 1,000 inhabitants. They also farmed efficiently. Instead of having fields that were spread out and time-consuming to get to and tend, they combined three crops that grew well together—corn, beans, and squash—in a method known as "three sister farming." The corn stalks grew straight up and acted as a trellis for the beans that wound around them. At the bottom of the corn, the big, broad leaves of the squash plants kept moisture in the soil. The people ate the corn, beans, and squash, and the beautiful, golden, trumpet-shaped squash blossoms, still widely used in Mexican cooking today. They also ate amaranth, a plant that is very nutritious but only for a short time. The delicate, new greens are tender and edible like baby spinach but within a few weeks they are just tough, indigestible weeds.

In the southwest, as in Mexico, chile peppers figure prominently in the cuisine and the culture. Peppers are members of the nightshade family like their other American relatives the tomato, the potato, and tobacco, and their Asian relative, the eggplant. The heat of peppers, from

Food Fable

WHERE SALT AND CHILE PEPPERS COME FROM

According to the Papago people of southern Arizona and northern Mexico, the creator of the universe invited all the people he had created to a magnificent dinner. Narama (First Man) "was among the last, and he came naked, covered with salt . . . [He] took salt from his face and sprinkled it upon the foods. Then he reached down, and his testes turned into chile pods. He began to sprinkle their spice onto all of the foods." This offended the other guests until Narama pointed out that all of the foods on the table—fruits and vegetables, fish and fowl—were not complete without salt and chile. The guests tasted the food, and agreed that salt and chile were necessities.[55]

the large, harmless green bell to the tiny hellfire Scotch bonnet (habanero), is measured in Scoville units—100 to 350,000. A braid of chiles, called a *ristra*, means good luck to a household, and is given as a housewarming gift. Native people had many different explanations for where chile peppers came from.

Chiles are nutritious, high in vitamins A, C, and riboflavin,[56] but capsaicin, the active ingredient in chile peppers, stimulates pain receptors in the mouth. How odd, then, that the chile pepper is chemically similar to another New World plant, vanilla. Perhaps the heat in the chile is a survival adaptation to prevent it from being eaten by the wrong animals, the ones that will not help its seeds spread. For example, small mammals like rabbits destroy the seeds because their bodies digest them. The digestive tracts of birds, on the other hand, remove only the protective outer coating of the seed, which make them the perfect animals to spread seeds.[57]

All of the native peoples in the Americas knew how to farm and preserve their foods efficiently, how to build roads for trade and temples for worship. They knew how to read the heavens and make calendars, how to govern vast empires. Their craftspeople knew how to make objects of great beauty out of gold and silver, and how to cook complex, sophisticated dishes. But what the Inca, the Aztecs, the Caribes, the Papago, and all the other native peoples in the Americas didn't know was that in Europe, Spain's Queen Isabella and King Ferdinand had finally decided to bankroll Columbus's voyage. The monarchs debated long and hard about spending so much money on a venture so risky. They didn't know then that spending more than one million *maravedis*—the equivalent of $151,780 in 1991 U.S. dol-

lars—would yield a 200 million percent profit and make Spain a great empire.[58]

COLUMBUS SETS SAIL FOR THE AMERICAS: 1492

On August 2, 1492, Columbus and his crew of ninety men attended Mass at the Church of St. George in Palos, Spain. The next day they set sail in three small ships, the 90-foot long *Niña*, the *Pinta*, and the ship carrying Columbus, the *Santa Maria*.[59] Six days later, they arrived in the Spanish-owned Canary Islands off the northwest coast of Africa, the last stop before heading west with the wind that Columbus hoped would carry them to the East Indies—the Spice Islands.

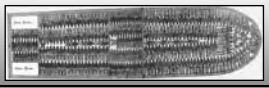
When they set sail from the Canary Islands on Thursday, September 6, 1492, Columbus's men had enough food to last them for one year.[60] They would have packed standard Spanish food that would last, mostly dried or salted: rice and dried chickpeas; beef, pork, anchovies, and sardines preserved in salt. There were surely casks of olive oil and enough wine to provide the one-and-one-half-liter ration that each man expected every day. There was also that misery of the sailor's life, the aptly named hardtack—the unleavened, rock-hard flour, water, and salt biscuit that was more hospitable to parasites like weevils than to humans. The sailors would supplement this with whatever fresh fish they could catch. If any dried fruit was on board, it was for the officers, not the crew. Vegetables, except perhaps garlic and onions, were absent in this diet.[61] There was no cook on board, so crew members took turns at midday preparing the one hot meal a day (at most) on a *fogón*, an open iron box. There was no top and no front, only a bottom filled with sand, a back, and two short, curved sides—just enough to keep the wood fire off the wooden deck.[62] Since the small ships were pitching on the waves nearly all the time, the food would have been a simple, one-pot meal like beans and rice with meat or fish. Below the deck, the hold was packed with food and water, firewood, gunpowder, rope, and other supplies, so the men worked, ate, and slept outside on deck. Rats, roaches, and lice were also standard on ships.

On September 9, when they lost sight of land behind them and there was nothing in front of them but sea and sky, the crew cried. Columbus wrote in the ship's log, "I comforted them with great promises of land and riches."[63] Columbus also led them in prayer several times a day, as Christianity required even on dry land. After other breaks in morale and false sightings of land in the coming weeks, the crew was near mutiny. Finally, land was sighted for real in what is now the eastern Bahamas on October 12, 1492, thirty-three days after they left the Canaries. Columbus named the island San Salvador—Holy Savior.[64]

"We saw naked people"[65]

Ashore, Columbus and his men prayed in thanks, claimed the land for Spain, and put up a cross. Natives came to greet them. Sure that he was in the East Indies, Columbus mistakenly called these people *Indios*—Indians. The first thing Columbus noticed about these Indians was that they were naked, good-looking, and friendly, which he assumed would make them easy to convert to Christianity. And they had only wooden weapons, which he knew would make them easy to enslave.

The stage was set for one of the greatest holocausts in human history.



Fifth Course

The Columbian Exchange and the Protestant Reformation: SUGAR AND VICE IN THE SIXTEENTH CENTURY

The collision of the eastern and western hemispheres—Old and New Worlds—and the foods, plants, animals, and diseases that went back and forth is called the Columbian Exchange. During what historians call the "time of Contact," humans overrode millions of years of natural development in life-forms on planet Earth by shipping them all around the globe. After only a little more than 500 years, it is too soon to tell what the long-term effects of this exchange will be.

OLD WORLD TO NEW

Columbus's arrival in the Americas and the wealth he found there built Spain into a superpower in the sixteenth century. The Spanish crown got twenty percent—the "royal fifth"—of everything that came out of its colonies in the New World. But mismanagement, overspending, and wars squandered the fortune. The sixteenth century began with Spain's rise to power; it ended with Spain starting to decline as the power passed to northern European countries which had converted to a new Christian religion, Protestant.



Map of Western Hemisphere, 1572. *Courtesy Corbis Digital Stock*

Columbus's "discovery" began a land rush to the Americas and all over the world as Europe sent explorers sailing in all directions. It was the Age of Exploration. Within two years, Spain and Portugal were ready to fight over boundaries. The pope mediated, the way the United Nations does now. In 1494, in the Treaty of Tordesillas, the two countries agreed to an imaginary line the pope drew through the New World from north to south. Everything west of the line—Mexico and most of South America—belonged to Spain; everything east—Brazil—was Portugal's.

The conquistadores who followed Columbus to the New World in the sixteenth century conquered the cuisines as well as the cultures of the native people. Spain immediately began to transplant its culture, especially its foodstuffs, to New Spain. Columbus returned to the Americas the following year, 1493, and brought Old World livestock with him: cattle, horses, pigs, goats, sheep. All, except the sheep, eventually took to the wild and reverted to their pre-domesticated state. The pigs turned into wild boars; the dogs went from protecting flocks to eating them, like the wolves they originally were; the horses found excellent grazing land and followed it across the plains—the *llanos*—in Venezuela, Argentina, and Uruguay, and later in North America.

As historian Alfred Crosby points out, "By 1600 all the most important food plants of the Old World were being cultivated in the Americas."[1] However, the vegetable foods were not readily accepted by the native people. The new animals and the products they yielded were another matter and changed native cuisines profoundly. They also changed the landscape, in some cases causing ecological disasters. Livestock reproduced at phenomenal rates. In three years, thirteen pigs produced 700.[2] Cattle grazed on land where natives had grown food plants. In some cases, Indians domesticated livestock themselves.

Some of the plant and animal life that arrived in the western hemisphere from the Old World came as stowaways. Seeds for weeds might get mixed in with grains, dung, or animal feed. Old World dandelions and daisies arrived this way. So did tumbleweed, Kentucky bluegrass, and the black rat that carries plague and typhus. A rat-caused famine occurred in Bermuda. With no natural enemies, the rats burrowed into the earth, took up residence in trees, and ate so much food that the people starved to death. Diseases crossed the Atlantic by accident, too—the common cold, diphtheria, malaria, measles, smallpox, typhus, whooping cough. Ten years after the Spanish arrived in Mexico, the native population had dropped by nearly ten million.[3] A hundred years later, ninety percent of the native population was dead, a decline from more than twenty-five million to about one million.

People native to the Americas had no immunity to Europeans diseases. In *Guns, Germs, and Steel*, Jared Diamond tries to answer questions that arise from the time of Contact. Why didn't the people in the New World have any immunities? Why didn't they have diseases of their own to give to the Europeans? Diamond has some theories. One is that New World people didn't have the livestock that Europeans did, which was where a great many of the zoonoses—animal diseases that cross over to afflict humans—originated. For example, the smallpox that ravaged Rome came from cows. Another is that the population of the New World was scattered and not concentrated in cities where normal human interaction would have exposed people to a variety of diseases and allowed them to develop immunities. Whatever the reason, the time of Contact was fatal to native Americans.

Mexico: *Mole* and *Carne*

The conquistador Hernan Cortés arrived on the Caribbean shore of Mexico in 1519. He had heard stories about the fabulous wealth of the Aztecs and he wanted it: "I came to get gold, not to till the soil like a peasant."[4] He had his men burn the ships so they couldn't run away no matter how tough things got. When word reached the Aztecs about these strange beings that had arrived by ship from the east, they thought it was their god Quetzalcoatl returning. The food that Cortés exchanged with the natives he met was passed on to Motecuhzoma (we call him

Some Foods from Europe, Africa, and Asia to the Americas

Animals	Vegetables, Herbs, Spices	Grains, Legumes	Fruits
Cat	Anise	Barley	Apple
*Cattle	Beet	Chickpea	Banana
Chicken	Broccoli	Lentil	Cherry
Donkey	Cabbage	Oats	Grape
Dog	Carrot	Rice	Lemon
*Goat	Celery	Rye	Orange
*Horse	Cilantro	*Sugarcane	Peach
*Pig	Cinnamon	Wheat	Pear
*Sheep	Coffee—1723, by the French		Plum
Rat (black)	Cucumber		Pomegranate
	Eggplant		Quince
	Garlic		Watermelon
	Ginger		
	Lavender		
	Lettuce		
	Mustard		
	Nutmeg		
	Olive		
	Onion		
	Parsley		
	Pepper—black		
	Sage		
	Sesame		
	Soy		
	Turnip		
	Yam		

* Brought to America in 1493 on Columbus's second voyage

Montezuma), who did not eat it but took the salt pork, dried meat, and biscuits to the temple of the god Quetzalcoatl as an offering.[5] When Cortés and his men arrived at Tenochtitlan, the Aztec capital city, they were amazed at its beauty and grandeur; some of them thought it was a dream. The dream continued when the Aztec people and Motecuh-

zoma welcomed Cortés and his men as gods. By the time the Aztecs realized that Cortés was human and only wanted gold, it was too late. The fierce Aztec warriors were no match for the Spaniards' guns or diseases. A smallpox epidemic throughout the capital assured Spanish victory. Fevers as high as 107°F turn smallpox's delirious victims into "a dripping, unrecognizable mass of [putrid smelling] pus." It is spread simply by breathing when the patient is alive and after he is dead by contact with blankets, utensils, or other articles he touched.[6] Soon the entire Aztec empire was under the control of Spain. But Montezuma lives on in a slang name for tourist diarrhea: "Montezuma's Revenge."

After hundreds of years of European influence, modern Mexican cuisine is very different from pre-Columbian native cuisines. One of the most important changes was that the diet of South American natives went from heavily vegetarian and very low fat to heavily meat-based with a great deal of fat. The three sisters of corn, beans, and squash shifted to three different sisters—corn, beans, and rice. Tortillas now came in wheat as well as corn, and were wrapped around stuffings that included *carnitas* (dried shredded pork), and *queso* (cheese). *Chili* (beans in a tomato sauce) became *chili con carne* (chili with meat). Mild chile peppers like Anaheims were stuffed with cheese to make *chile rellenos.*

Contact with the Spanish changed chocolate, too. Now, Mexican chocolate is a combination of chocolate, freshly ground from cacao beans, if possible; *canela* (cinnamon); and granulated sugar. Chocolate *caliente* (hot) is still frothed by hand with a *molinillo* rolled quickly back

Food Fable

MOLE MYTHS[7]

As chocolate historians Sophie and Michael Coe point out, there are many myths surrounding the beginnings of *mole* (MO lay), but it is definitely *not* of Aztec origin. The Aztecs never combined chocolate with food. It was consumed only as a beverage, often ritually after a meal, when they also used tobacco. The Italians, however, experimented wildly with chocolate, beginning in the 1680s. They put it in pasta, in pasta sauce, in polenta, in breading for liver. They fried eggs in cacao butter. Since these recipes predate the earliest recipes for *mole,* the Coes think that perhaps the Italians invented *mole.* Late-seventeenth-century Hispanic stories give different, vague versions of the debut of *mole:* it was created by accident when chocolate fell into a stew—or it was created on purpose. It was made to honor a bishop—no, a Spanish official. The only agreement is that the word *mole* comes from *molli,* the Aztec word for sauce or concoction.

INGREDIENTS:

Pavo in Mole Poblano

(Turkey in Sauce)

One of the earliest recipes for *pavo* (turkey) in *mole* comes from the state of Puebla, southeast of Mexico City. It was an Old World–New World fusion food. The main ingredients—turkey, tomatoes, and chocolate—were New World. So were the three different kinds of chile peppers—mulato, ancho, and pasilla. But it was seasoned with Old World herbs and spices—black pepper, cinnamon, sesame, cloves, and anise. Sweetness was provided by Old World raisins and sugar, and Old World garlic made it pungent. And even though it contains a New World legume, peanuts, their use as a thickener is a technique that goes back to the ground almond thickeners Europeans learned from the Arabs in the Middle Ages.

and forth between the palms of the hands, as if you were trying to start a fire, just as the Aztecs did. But chocolate historians believe that one chocolate dish considered typically Mexican—*mole* might not be.

Whatever its origins, *mole poblano* is still the signature dish of Puebla. But many more kinds of mole come from Oaxaca (wa HA ca). There are spicy moles; red, yellow, and green moles; sweet and sour moles. American Rick Bayless adds red wine to his mole.[8] Recently, a restaurant opened in Oaxaca that serves what could be called *mole nuevo*, lighter because it is made with vegetable or canola oil instead of lard. Traditionalists resisted it.[9]

Other Mexican uses of Old World animals include *pozole*, pork and hominy stew; oxtail stew; and tripe stew. There are also many Mexican cheeses made from cow's milk, like *queso fresco*, *panela*, and *ranchero seco*, a dried cheese, as its name says.[10] Desserts, too, were made from Old World foods. Eggs and sugar make *flan*, Spanish custard. Wheat treats include *churros* made of dough like *pâté à choux*, extruded through a machine or a pastry bag into their distinctive long rope shape, then deep fried and rolled in cinnamon sugar.

New Mexico: The Pueblo Revolt

In what is now the Four Corners area of the United States, where Utah, Colorado, Arizona, and New Mexico come together, native people lived

in villages like apartment buildings—in Spanish, *pueblo*. Around the year 1100, about 1,200 people lived in one of these pueblos, the five-story, 800-room Pueblo Bonito in northwestern New Mexico. It was the largest apartment building in the world until 1882, when a bigger one was built in New York City. Descendants of the people spread throughout the American southwest and built pueblos on mesas, flat-topped mountains, many along the upper Rio Grande River. Among them were the Zuni and the Hopi—"the Peaceful People." Pueblo men irrigated the fields and farmed; the women ground corn and cooked in the large, flat common area, the plaza (in Spanish); the adult males retreated to an underground *kiva* for religious and tribal matters. In 1540, a Spanish soldier reported that the people in a typical pueblo were "usually at work." And efficient workers they were, with very clean buildings for grinding corn and preparing food. Three women would prepare corn at one time, each with a *mano* and a *metate*, like an assembly line: "One of them breaks the corn, the next grinds it, and the third grinds it again . . . A man sits at the door playing on a flute while they grind. They move the stones to the music and sing together."[11] They also ground ripe pods from mesquite trees into meal, added water, and made sun-dried crackers.

But the Spaniards were looking for gold, and the pueblo people had none and also were not Christian. The Spanish soldiers ignored the line of sacred corn meal the people laid out on the ground as their boundary; took whatever they wanted from them; looked for gold and got angry when they found only beans, squash, tortillas, and turkeys, but took them anyway; told the people if they surrendered they would not be harmed, then butchered thousands of them when they did. Acoma Pueblo was burned to the ground. Everyone in the pueblo—male and female—over the age of twelve was sentenced to twenty years of slavery; all men over twenty-five also had one foot chopped off. Enslaved, the Indians took care of the cattle, sheep, horses, goats, and pigs, and tended the olive groves and the orchards of peach, pear, fig, date, pomegranate, cherry, quince, lemon, apricot, and orange trees.

In 1610, the Spanish founded the city of Santa Fe (Holy Faith) and forced the Indians to build it. The pueblo people were willing to accept Christianity, but only along with their own religions, so the Spanish hanged them and then raided the sacred *kivas* and destroyed all the religious items, including the *kachinas*, the masked images of the holy spirits that the native people believed brought rain and taught hunting and farming to humans. This brutal forced conversion did not last long. Then came drought and tribes of raiders called *apachu nabahu*—"enemies of the cultivated fields"—which sounded like "Apache" and "Navaho" to the Spanish. The raiders stole all the stored food and ran off with the livestock. The Spanish and the Indians tried to survive on boiled or roasted leather and hides. Starvation was widespread, then disease. The pueblo people believed these disasters had been sent because

they had turned their backs on their native religion and stopped worshiping the *kachinas*. They also saw that the Spanish and their God were powerless. Finally, in a masterpiece of planning, on August 10, 1680, all the pueblos throughout New Mexico revolted at once. They got rid of anything connected with the Spanish, including the food. They killed the priests, demolished the churches, slaughtered the sheep and cattle and pigs, uprooted the orchards, ripped out the grapevines, and turned the horses loose. The horses headed for the Great Plains, where the Kiowa and Comanche, the Sioux and the Cheyenne, from Texas north to the Dakotas, learned to ride them. The Spaniards were forced out of New Mexico entirely, south to El Paso (now Texas). It was a great victory for the native people—temporarily. Fifteen years later, the Spanish returned to stay.

Peru: Lima Beans and New World Wine

Francisco Pizarro was the conquistador who came to Peru in 1532. The nightmare that had occurred with the Aztecs repeated itself for the Inca—the capture and death of the leader, Atahuallpa; the demands for gold. The Inca, too, died in horrifying numbers from European diseases. The Inca regrouped and attacked Pizarro. In 1525, he founded the city of Lima, now the capital, so he could defend himself against Inca warriors. The city eventually gave its name to one of the members of the bean family native to South America.

Between 1540 and 1550, Spain transplanted foodstuffs to Peru: wine grapes, figs, pomegranates, quinces, wheat, barley, citrus. This explosion of Spanish food was subsidized by the crown, which offered a huge prize—two bars of silver—to the first person in each town who produced Spanish foods like wine, olive oil, wheat, or barley on a large scale in Peru. There was wealth to be made in cultivating the new foods, but getting them to survive and thrive in the New World wasn't always easy. Of the more than 100 olive tree cuttings that one man imported to Peru, only three survived. These were so valuable that he planted them on a walled farm in a valley and had them guarded by "more than 100 blacks and 30 dogs," which were either bribed or distracted, because one of the plants was stolen and showed up far away in Chile where it produced numerous trees. Three years later, somebody sneaked back to the farm and replanted the original tree exactly where they had stolen it.[12]

From the early 1520s to the late 1550s, vineyards of European grapes were established in Central and South America, on both sides of the Andes. Wild grapes grew in the Americas, but they were unsuitable for wine. How did viticulture spread so quickly? It was the law. Under the *encomienda* system, Spanish settlers in New Spain were given land and Indians to work it, and were required to plant 1,000 vines "of the best quality" for every 100 Indians they owned. Grapevines didn't thrive in

Mexico because of the climate, but they did in Peru, especially in the south in the Moquegua Valley. There was a ready-made market for wine in Peru, too, because the vineyards were near the silver mines at Potosí and all their enslaved Indian workers. Peruvian wine makers were so successful after they began producing wine in 1551 that Spanish wine makers protested; in 1595 Spain's King Philip II protected Spanish vintners by restricting grapevine planting in the colonies. Peru had a thriving wine industry until it was heavily damaged in the late nineteenth century by an epidemic of phylloxera, a yellow louse almost impossible to see with the naked eye, that eats the roots of *vinifera* grapevines.[13]

Peruvians took to the coconut quickly. The word *coco* is Spanish for "monkey," because they are both round, have brown fur, and eyes. Coconut milk is used frequently, replacing water, chicken or beef broth or stock, or tomato sauce or juice in many recipes. In 1991, food historian Raymond Sokolov wrote: "Peru's traditional dishes . . . comprise the last great cuisine undiscovered by a world gone mad for new tastes." However, he conceded that "[r]oast or stewed guinea pig has no future in the non-Andean world." And probably neither does roasted llama heart on a stick.[14]

Argentina: Gauchos and Beef

European horses running wild on the pampas—the prairies—of Argentina reproduced to the point that it took a day for a herd to pass by. Horses preceded humans into the flat plains of the area around what is now the capital, Buenos Aires, because permanent settlers in 1580 found huge wild herds already there. The Spanish brought their cattle, the ancestors of the Texas longhorns, and those thrived, too. Herds doubled nearly every fifteen months.[15] Soon, beef was plentiful and cheap. As historian Alfred Crosby says, "there were probably more cattle in the New World in the seventeenth century than any other type of vertebrate immigrant."[16] Beef provided food for the enslaved Indians working in the mines. But a more important use was for fat—tallow—to make candles, especially to light the mines. Hides, too, were more important uses of cattle than food. They were tanned and turned into armor and vessels of all kinds, from trunks to drinking cups.

A beef cuisine grew in Argentina, especially using a technique learned from Caribbean natives—the barbecue. Argentine barbecue is basted with brine. Barbecue sauce is the vinegar-based *chimichurri*.[17] Modern Argentine marinades and salsas are often based on reductions of Argentine wines.[18]

Another classic Argentine dish is empanadas, roughly translated as "stuffed turnovers." They, too, would not have been possible without Old World foods. The dough is made from wheat and lard; the filling usually contains meat. In Argentina, the meat can be mixed with New World potatoes, or sometimes fruit, like Old World peaches.[19]

Culinary Confusion

BARBECUE

What Americans refer to as barbecuing usually means grilling, and is done quickly and aboveground. True barbecue is pit roasting. This involves digging a pit or providing some kind of enclosure, and takes hours so the meat can attain a smooth texture and smoky taste. (See Los Angeles County Annual Barbecue, Chapter 11.)

Along with the cattle and beef cuisine, the Spanish transplanted their cowboy culture. Americans didn't create the cowboy—Spain did, in the Middle Ages. He was a *vaquero*, from *vaca*, the Spanish word for "cow," and he knew how to use a horse to wrangle a herd, how to handle a branding iron, and what to do on a round-up. In Argentina and Uruguay, the *vaquero* was called a *gaucho*. He brought the rest of his Spanish cowboy vocabulary with him: "bronco, lasso, rodeo."[20]

Brazil: *Feijoada* and *Farofa*

Brazilian food is heavily influenced by Portugal, its colonial master, and Africa, where a large part of its population originated. Approximately thirty-eight percent of the ten million slaves shipped from Africa to the New World went to Brazil, mostly to work in the sugarcane fields.[21] Brazil's most famous dish, an elaborate *moros y cristianos* (black beans and rice) with much meat, is a fusion of Old and New World foods and shows the influences of slave cooking in the use of pig parts and in the green leafy vegetable accompaniment. It gets its name from the Portuguese word for "bean"—*feijão* (feh ZHWAH).

The beans and their liquid provide the sauce. The traditional accompaniments include rice, kale or collard greens, orange slices, and a hot sauce with lime juice.

The province of Bahia ("the Bay") in eastern Brazil has a very long Atlantic coastline, and much shrimp in its cuisine—dried shrimp, shrimp in sauce, fresh shrimp garnish. Sometimes dried ground shrimp, with their intense flavor, are used as a sauce base for a fresh shrimp dish. The signature fat is *dendê*—palm oil—an African import. One of the most famous dishes from Bahia, *vatapá*—chicken in shrimp and almond sauce—combines these ingredients and adds many more from the Old World, including coconut milk; rice flour is the thickener. In *vatapá* and another Bahian dish, *xinxim de galinha*—chicken with shrimp and

peanut sauce—the *dendê* oil is added at the end, like a butter enrichment. Hearts of palm are eaten fresh in Brazil, but are brined and canned to be sold commercially. In the United States, they are usually used in salads.

Cassava, a root, was a staple starch in pre-Columbian Brazil. It has many other names: manioc and yucca in Central and South America; *fufu* in Africa; *farinha* in Portugal. But most Americans know it only as tapioca, which we make into a sweet pudding, often for children and invalids. In Brazil, cassava meal is *farofa*, grains the color of sand and the consistency of coarse talcum powder, toasted in *dendê* and sprinkled over the top of food as a garnish.

A fruit native to northeast Brazil is the cashew (*Anacardium occidentale*), one of the edible members of the poison ivy family (the others are pistachios and mangoes). The cashew fruit grows on trees. It is approximately the shape of a hachiya persimmon, but yellow, with the comma-shaped cashew nut hanging from the bottom. The fruit can be

INGREDIENTS:

Feijoada

(from *The Book of Latin American Cooking* by Elisabeth Lambert Ortiz, p. 215)

4 pig's ears
1 pig's tail
Salt
3 pig's feet, split
1-pound piece of *carne sêca*
3-pound smoked beef tongue
½-pound piece of lean bacon
4 cups black beans
1-pound piece of lean beef chuck or bottom round
1 pound *linguiça* sausage
1 pound fresh pork sausage
2 tablespoons lard or vegetable oil
2 onions, finely chopped
2 cloves garlic, minced
2 tomatoes, peeled, seeded, and chopped
1 fresh hot pepper, seeded and minced, or ⅛ teaspoon Tabasco (optional)
Salt, freshly ground pepper

sweetened and preserved or processed and used for juice. Cashew nuts never appear in their shell in a bowl of mixed nuts, like almonds, walnuts, and pecans, because they are doubly protected, with a corrosive substance sandwiched between two layers of shell. Human nutcrackers can't get the shell off, but the big beaks of parrots can. So can roasting.[22] The Portuguese were responsible for spreading the cashew from Brazil to their colonies in the East Indies. It also thrives in India.

Plantains—*plâtanos*—are also found throughout the southern hemisphere and the Caribbean. They are in the banana family, but unlike bananas, they have to be cooked to be eaten. They are usually boiled or fried, or both, and served as a sweet, starchy side dish.

One foodstuff that Europeans invented and that Brazilians took to right away is rum. Brazilians are magicians with alcoholic beverages. Brazilian rum, called *cachaça* (ca CHA sah), is used to make a cocktail called a *batida* (ba CHEE dah). It is mixed with lime juice and sugar, or coconut milk, or passion fruit, pineapple, etc.[23] The history of rum begins with the history of sugar, an Old World food that grew extremely well in the New World.

The Caribbean: Sugar

For the most part, European settlers were more interested in seeing if Old World foods with already established markets could be produced more cheaply and in greater quantities in the New World. One food in particular fit the bill. It quickly rose to dominate the international market, created huge fortunes on both sides of the Atlantic, caused millions of people to be enslaved, created new professions, and changed the eating habits of *Homo sapiens* completely. It was sugar, *Saccharum officinarum*.

The introduction of chocolate, coffee, and tea into Europe caused a rise in the demand for sugar, while the availability of sugar increased the demand for chocolate, coffee, and tea. A sugar spiral developed: as sugar became more available, its price dropped; as its price dropped, it became more available to more people. What had been a medicine for the rich in the Middle Ages was a staple for even the poor by the middle of the eighteenth century.

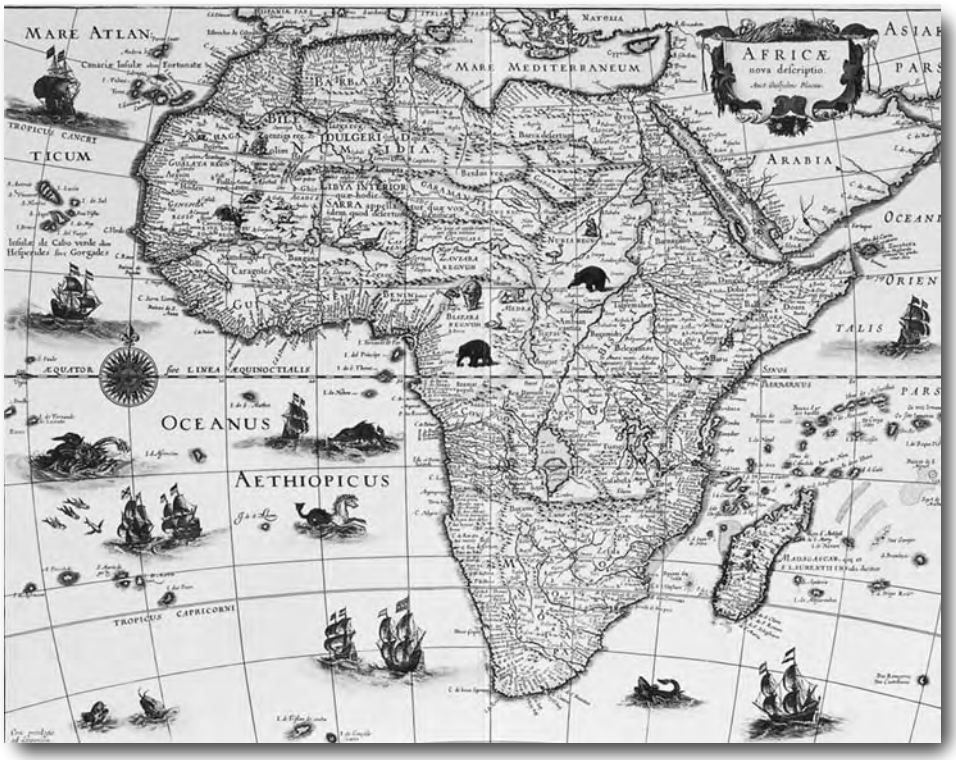
Sugar growing, harvesting, and processing were extremely labor-intensive, and the labor was slaves from Africa.

The Caribbean: Slavery—The Notorious Middle Passage

The stench coming from the ship was overwhelming: human excrement, urine, vomit, blood, sweat, and misery. Just as early explorers could smell the blooming flowers of America 100 miles out to sea, later

SUGAR CHRONOLOGY

8,000 B.C.	Sugar begins as a grass in New Guinea
1st century A.D.	Indians learn how to crush sugarcane and extract white crystals
8th century	Arabs spread sugar production throughout empire
13th century	Antwerp, Belgium is European sugar refining center
1319	First recorded direct shipment of sugar arrives in England[24]
1493	Columbus introduces sugarcane on his second trip to the Caribbean
1493–1625	Spain dominates the Caribbean and sugar production
1500	Portuguese island of Madeira is world's largest producer of sugar[25]
1544	England begins refining sugar, taking over industry from Low Countries, especially Antwerp, Belgium[26]
1585	London is the center of European sugar refining[27]
1588	England defeats Spanish Armada; England colonizes in the Americas
1619	First Africans arrive in Jamestown, Virginia; attempts to grow sugar fail
1625	Europe gets most of its sugar from Portugal (Brazil); first British settlement in Caribbean at St. Kitts
1650	Lemonade invented in Paris because of drop in sugar price[28]
1650–1850	England, France, Denmark, Netherlands in Caribbean sugar production[29]
1655	British invade Jamaica[30]
1660	British sugar imports exceed all other colonial produce *combined* -[31]
1701–1810[32]	252,000 African slaves to Barbados; 662,400 African slaves to Jamaica
1733	British Parliament passes Molasses Act to prevent North American colonies from trading with French West Indies
1750	In England, sugar is common even among the poor[33]
1764	British Parliament passes Sugar Act to raise revenue to keep troops in North American colonies after French and Indian War
1791	Successful slave revolt on Haiti (St. Domingue) halts sugar production
1813	First sugar beet refinery, in Passy, France, after Napoleon orders its cultivation to make France self-sufficient
1838	England ends slavery[34]
1848	France ends slavery[35]
1876	Slavery ends in Puerto Rico[36]
1884	Slavery ends in Cuba[37]



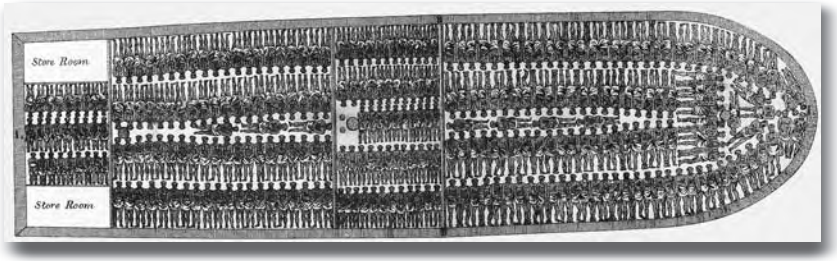
The European view of Africa, 1650. *Courtesy Corbis Digital Stock*

sailors could smell slave ships 100 miles away. This was the notorious Middle Passage, the middle part of the triangle trade, the trip from West Africa to the western hemisphere. No one wanted to be downwind of a slave ship.

The Caribbean was one of the points on what historians call the "triangle trade": sugar and rum from the Caribbean to Europe, goods from Europe to Africa, slaves from Africa to the Caribbean. Portugal had its own triangle trade which sold "third-grade tobacco soaked in molasses"[38] for slaves in Africa, shipped them to Brazil, then brought the good tobacco to the European markets. In the American triangle trade, molasses was shipped from the Caribbean to New England, where it was processed into rum, then the rum was traded for slaves in Africa, the slaves were sold in the Caribbean, molasses was shipped to New England, etc. On all of these trade routes, the Middle Passage was the same horror.

Why slavery? Why not some other form of labor? Native Americans weren't suitable because they died—in some cases became extinct—from European diseases. West coast Africans were kidnapped by slave traders

or African tribal enemies who had guns and nets. One of the first fears of those captured was that they were going to be eaten by the strange creatures that had captured them, "those white men with horrible looks, red faces, and long hair."[39] Sometimes the captives were forced to drink alcohol, which further added to the bizarreness of the experience. Then they were chained two-by-two and forced to get on the ship. Here's a drawing of how the slaves were packed.



A slave ship. *Courtesy National Archives and Research*

The hold, the part of the ship below the deck, was five or six feet high at the most. The male slaves were laid on the floor, with another layer on a shelf above them. If the hold was six feet deep, there were two rows of shelves. Each adult male slave was allowed a space that was *maximum* six feet long and sixteen inches wide. If a man was taller than six feet, he would have to spend the entire voyage with his knees bent; if his shoulders were wider than sixteen inches, he would have to spend the voyage lying on his side. Sitting upright was impossible because of the shelf above him. Slaves were sick with vomiting and a violent diarrhea known as the "bloody flux." If they were on the top shelf, it dripped down on those below.

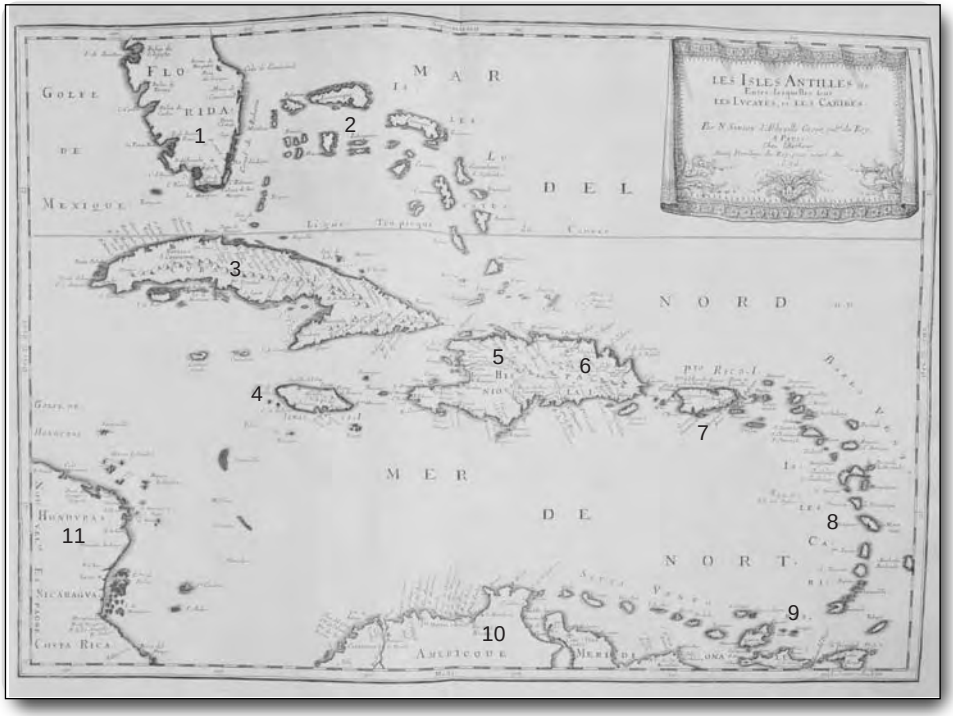
Women were not chained so that the sailors could have unlimited access to them. Rape was a standard event for African women on slave ships. But allowing the women to roam freely on the ship backfired. They knew who was drunk on duty and who was passed out; they could find out where the keys to the locked doors and the chains were kept, and sometimes they got them. Women became very important in slave ship revolts. The most famous revolt was on the *Amistad* in 1839, made into a film by director Steven Spielberg in 1997. For many years, historians assumed that the revolt on the *Amistad* was a rare event, but after the 1960s, when historians were not just white men, but African-Americans, women, and other minorities, their research revealed that mutinies on slave ships were not rare, but common. After all, the slaves had nothing to lose. Unfortunately, the slave revolt on the *Amistad* was rare in its success.

An additional ordeal for the captives on the slave ships was the cheap-as-possible food. They despised the horse beans in slimy sauce they got and threw it around. Sometimes they were fed their native foods like yams, rice, and palm oil. Some tried to commit suicide by refusing to eat. But slaves that weren't eating were valuable cargo in danger of being lost. If whipping or beating didn't get them to eat, forcing their jaws open with a metal device that worked like a car jack usually did. On the other hand, if the voyage took longer than expected and supplies of food or water were running low, slaves were thrown overboard. Ship owners didn't care if part of the cargo was lost this way; it was a business expense and they were insured.[40] The slave trade was very lucrative, producing profits of more than 100 percent.

The nightmare didn't end when the ship arrived in port. There, the slaves were sold at auctions like farm animals and sent to work on the sugar plantations. The tall sugarcane stalks were chopped down with machetes, leaving a razor-sharp stump. It was like working in a field of bayonets. In the tropical climate, before antibiotics, any cut could lead to a life-threatening infection.

Boiling the sugar down to crystallize it was particularly brutal work. Slaves worked in shifts that could last all day and all night; they got Sunday off. They had to stand barefoot on stone floors for the entire shift, which was painful. Tired slaves lost fingers as they fed the cane through the rollers on the grinding machines; "a hatchet was kept in readiness to sever the arm."[41] The majority of the slaves taken from Africa and transported to the Americas—forty percent—went to the Caribbean sugar islands.[42] Life was so harsh the slaves often died within four years, so a new supply was constantly needed. It was cheaper to buy new slaves than to take good care of the ones you had. They were disposable.

Slaves on the plantations were fed as cheaply as possible. Their food had to be imported because sugar was grown on all available land. The mainstay of the slave diet was salted beef until the British settled North America, then low-grade salted, dried cod was used. In the eighteenth century, England decided that breadfruit from Tahiti would be a cheap food for its slaves on Jamaica. A relative of mulberry and jackfruit, the melon-sized starchy breadfruit grows on trees and to some, tastes like Yorkshire Pudding or mashed potatoes. But the crew of the ship carrying the breadfruit, the *Bounty*, mutinied after Captain Bligh withheld their grog ration, accused them of pilfering from his personal coconut stash, and cut their food rations in half. Set adrift in a small boat, Bligh eventually reached land, was given another ship, and got the breadfruit to Jamaica, only to discover that the slaves didn't like it. However, it grew well there and still does. It is valued in some countries as feed for livestock, in Trinidad as human food, and in Hawaii as a substitute for taro in poi.[43]



The Caribbean in 1656, after English and French attacks on Spanish Possessions. Spain is left with only Cuba, Puerto Rico, and Santo Domingo. *Courtesy Corbis Digital Stock*

1. Spanish Florida
2. English Bahamas
3. Spanish Cuba
4. English Jamaica
5. French Haiti (Saint Domingue)
6. Spanish Santo Domingo
7. Spanish Puerto Rico
8. Lesser Antilles: French Martinique, Guadeloupe, St. Christopher; also British Dominica and Barbados; and Dutch settlers
9. British Trinidad and Tobago
10. Spanish Colombia
11. Spanish Yucatan, Mexico

The Caribbean: Rum

One of the by-products of sugar processing resulted in a new alcoholic beverage. The sixteenth century was the beginning of what historian David T. Courtwright calls "the psychoactive revolution," the intercontinental traffic in drugs, including sugar and caffeine, that characterizes the modern world. Rum first appeared in the 1640s in the Caribbean. Since sugar production was no longer under the control of Muslims who forbade alcohol, nothing stood in the way of creating a new type of alcohol from sugar or its by-products. In the hands of the Protestant British, sugar became rum.

There are two different ways of making rum. One, agricultural rum, is made from the fresh-pressed juice of the sugarcane stalk. The other is made from molasses. In both cases, yeast is added to the liquid and

allowed to ferment, usually for twenty-four to forty-eight hours. It is then distilled and aged in oak barrels that formerly held whiskey or bourbon. Most rums are blended after they have aged, but some are blended first, then aged together. It is the aging process in the oak that produces rum's rich brown color. A rum must age for at least three years to be called *vieux* (old).

Rum was probably first distilled on the island of Barbados in the 1640s, where the Mount Gay label has been in existence for more than 300 years. The tiny British colony produced more wealth for England than its tobacco-growing colonies of Virginia and Maryland put together. The River Antoine distillery on Grenada, which makes Rivers Rum, still doesn't use electricity. Water powers the wheel that crushes the cane; *bagasse*, the solid crushed cane left after the juice is extracted, is burned to fuel the still. Today, Demerara, a county in Guyana, is the "largest supplier of bulk rum from the Caribbean."[44]

NEW WORLD TO OLD

Spanish, Portuguese, and British transplants of foods, animals, and people had an immediate impact on their colonies in the New World. Using the western hemisphere as a giant plantation for the eastern hemisphere made familiar Old World foods more available to people in the Old World. So there was little incentive for Europeans, especially, to experiment with New World foods.

" . . . it being new, I was doubtful whether it might not do me hurt."[45]

So wrote British writer Samuel Pepys in his diary on March 9, 1669. He was talking about a new beverage made from an Asian fruit that had just reached Europe. He thought it "a very fine drink," but still, he was worried about that glass of orange juice. In the years after Columbus's voyages, every country in the world was bombarded with new foodstuffs and new cuisines. But cross-cultural change is difficult; convincing people to eat strange foods from other parts of the world is not always easy. People in Europe hadn't been sitting around for centuries wishing they had a tomato or hoping a pumpkin would appear. It took about three hundred years for most of the New World foods to be accepted in Europe. Some, such as maize, still aren't fully accepted as human food, although it is all right for animals. Sometimes strange new things can only be described by connecting them to familiar old ones. So Columbus's son described cocoa beans as special "almonds"; the explorer Coronado

Some Foods from the Americas to Europe, Africa, and Asia			
Animals	**Vegetables, Spices**	**Grains, Legumes, Drugs, Nuts**	**Fruits**
Muscovy Duck	Allspice	Beans—navy, lima	Avocado
Turkey	Amaranth	Corn (maize)	Blueberry
	Beans—green	Manioc (cassava, tapioca)	Cacao
	Jerusalem Artichoke	Peanuts	Cherimoya
	Jicama	Pecans	Cranberry
	Peppers—bell	Quinine (anti-malaria drug)	Papaya
	Peppers—hot	Quinoa	Pineapple
	Potatoes—sweet	Tobacco	Tomato
	Potatoes—white[46]	Wild Rice (a grain, not rice)	
	Squash—pumpkin		
	Squash—sapote		
	Sunflower		
	Vanilla		

wrote about strange "cows" with horns, which were buffalo; the potato became "earth apple"—in French, *pomme de terre*. In Italy, the tomato became "golden apple"—*pomodoro*—because the early tomatoes, which are heirlooms now, were yellow, and because golden apples were familiar from Greek mythology.

Two New World items that did find immediate acceptance in the Old World were turkey and tobacco. Europe, used to eating fowl and accustomed to chicken as a special occasion centerpiece, was ready for a big, new, festive, good-tasting bird. Soon, turkey replaced heron, swan, peacock, and other birds that were nearly inedible but made magnificent presentations. Tobacco grown in the Chesapeake, the area around the bay in what is now Maryland and Virginia, caught on everywhere it went. Within a hundred years of Columbus's first voyage, tobacco could be found even in the far reaches of Siberia.[47] Beans were also readily accepted, perhaps because they resembled pulses like chickpeas and lentils. By the middle of the sixteenth century, they appeared in botanical books, and the kidney bean was known throughout Europe as the French bean. And, just as diseases traveled west across the Atlantic Ocean, one major disease traveled east from the Americas to Europe—syphilis, which spread through Europe like wildfire and then came back to the Americas in a more virulent form.

Spain: Chocolate and *Paella*

Chocolate probably would have caught on sooner in Europe, but the Spanish nobility considered it a powerful aphrodisiac—the Viagra of the sixteenth century—and kept the recipe secret by locking it up in a monastery for almost a century. But something so good couldn't be kept under wraps for long; others eventually figured out the recipe and a craze was born. Chocolate was used in different ways in different European countries. Like the Aztecs, the Spanish consumed chocolate as a beverage, but sweetened with sugar. The French confined it to dessert.

The Spanish immediately developed a liking for the wild chile—the chiltepin or bird pepper (*Capsicum annuum* var. *aviculare*) which became known throughout Europe as the "Spanish pepper." It was so highly regarded that they kept it whole in salt cellars. Then each diner took out as much as he wanted and crumbled it into his food.

The traditional dish of Spain is *Paella Valenciana*, and it is a mixture of Old and New World foods. *Paella* refers to the pan in which it is cooked; *Valenciana* is the region of Spain where it originated. The classic ingredients are Old World rice, several kinds of meat, olive oil, and saffron; and New World green beans, tomato, and paprika.

Don Quixote: The Peasant Quest for Food

The upper classes ate chocolate and chiles and meat. The poor were still hungry. This difference in social classes, often shown through food, underlies everything in *Don Quixote* (kee HO tay), one of Spain's most famous literary works, written in 1602 by Miguel de Cervantes. This satirical novel, which was the basis for the Broadway musical and movie *The Man of La Mancha*, is about Don Quixote, a man who still believes in knighthood and sets out on his horse to slay dragons—except that they are windmills—and rescue the fair lady—who is really a woman of low repute. He has a trusty sidekick, Sancho Panza. These two—the noble-hearted cowboy and his pudgy comic relief sidekick, who, like the court jester, is more philosopher than fool—set the standard for cowboy stories and movies for centuries to come. They are also two halves of the human condition. Quixote is spiritual, a dreamer. Sancho Panza—which means "holy belly"—is the realist who lives in the physical world. From Don Quixote, we get the adjective *quixotic* (kwik ZAH tic)—extremely idealistic, romantic, and impractical.

Don Quixote made a Spanish food famous. The vegetable and meat stew, *olla podrida*—literally "rotten pot"—appears six times. It is mentioned in the second sentence of the book, to show how poor Quixote is and how expensive food is: "An olla of rather more beef than mutton, a salad on most nights, scraps on Saturdays, lentils on Fridays, and a pi-

geon or so extra on Sundays, made away with three-quarters of his income."[48] This is a difficult life for a man who knows that "veal . . . is better than beef . . . kid . . . is better than goat."[49]

Most of the time Quixote and Sancho have only bread and water to eat. If they are lucky they might get a bit of cheese, an onion, grapes, acorns, or medlars—fruit originally from Persia which even ripe is inedible until it is packed in wet bran or sawdust and ferments internally.[50] A sample of the food at inns explains why upper-class people traveled with their own chefs and cooking staffs. One innkeeper tells Sancho, "all I have is a couple of cow-heels like calves' feet, or a couple of calves' feet like cowheels; they are boiled with chick-peas, onions, and bacon.'"[51] At another, on a Friday, Quixote gets stockfish and "a piece of bread as black and mouldy as his own armour."[52] At a low point, Don Quixote says, "I have a mind to let myself die of hunger, the cruelest death of all deaths." But Sancho loves food and life and says, "I'll stretch out my life by eating."[53]

From the point of view of these starving people, upper-class eating habits and the theory of humors are ridiculous. A starving Sancho sits down to a feast only to have each dish yanked away from him by a Hippocrates-quoting physician: "I ordered that plate of fruit to be removed as being too moist, and that other dish I ordered to be removed as being too hot and containing many spices that stimulate thirst . . . do not eat of those stewed rabbits there, because it is a furry kind of food; if that veal were not roasted and served with pickles, you might try it; but it is out of the question." Sancho points out the obvious—"to deny me food is the way to take my life instead of prolonging it"—and asks for some *olla podrida*, "and the rottener they are the better they smell." When the physician says it is not nourishing, fit only for students and peasants, and that a gentlemen should eat "a hundred or so of wafer cakes and a few thin slices of conserve of quinces," Sancho threatens to kill him.[54]

When Sancho finally gets a major meal to feed his *panza*, it is a starving peasant's food fantasy. The wedding of the wealthy Camacho is a utopian exaggeration, the Spanish equivalent of the Italian Bengodi, where the vines drip sausages (see Chapter 4). The first thing Sancho sees is:

> . . . a whole ox spitted on a whole elm tree [stuffed with a dozen suckling-pigs] . . . and six stewpots . . . [which] swallowed up whole sheep . . . Countless . . . hares ready skinned and the plucked fowls . . . numberless the wildfowl and game of various sorts suspended from the branches that the air might keep them cool. Sancho counted more than sixty wine skins of over six gallons each . . . There were . . . piles of the whitest bread . . . a wall made of cheeses . . . two

> cauldrons full of oil . . . for cooking fritters, which when fried were taken out with two mighty shovels, and plunged into another cauldron of prepared honey that stood close by. Of cooks and cook-maids there were over fifty . . .

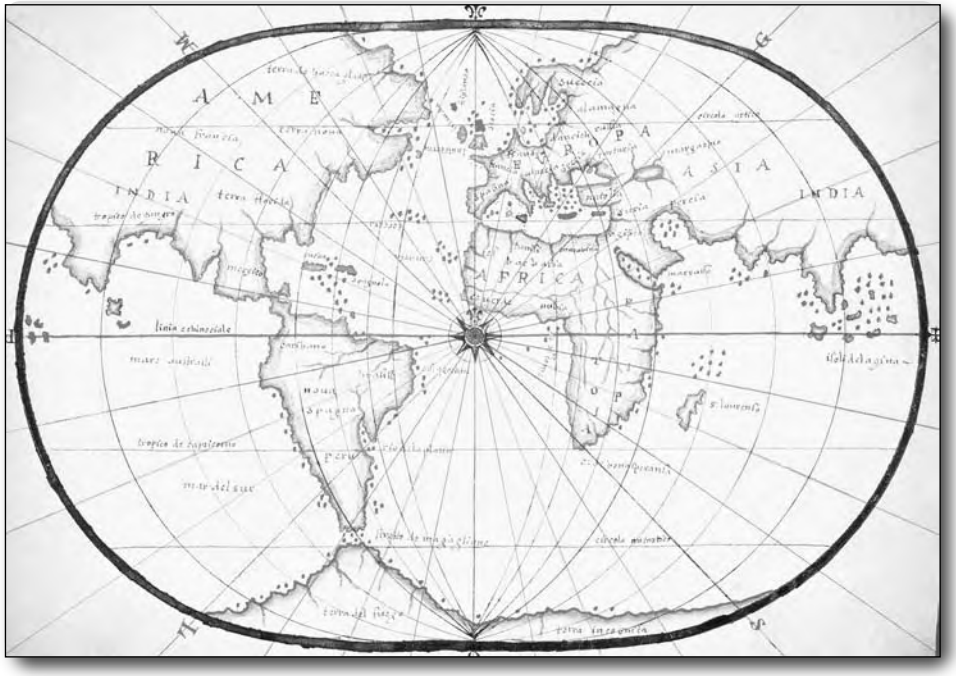
There are trunks full of spices, too. When Sancho begs to dunk a bit of bread into one of the pots, a cook gladly skims three hens and two geese off the top, to hold him until dinner time.[55]

Sancho is able to eat so well here because Camacho is not a member of the upper class with all of its food rules; he is a farmer who has made good and who appreciates food. It is clear that what the peasants want is meat, and the order of food is clear, too, with chickens and geese still the most expensive and desirable. New World foods are entirely absent.

Spain's phenomenal new wealth inspired other European countries to send explorers out, especially its western neighbor, Portugal.

CHRONOLOGY—EXPLORATIONS

When	Name	Country Sponsoring/ Nationality	Where Explored
1003	Leif Eriksson	Vikings	North America
1405–1433	Zheng He	China	Africa; probably South America
1415–1460	Henry the Navigator (Dom Henrique)	Portugal	Africa, west coast
1488	Dias	Portugal	Africa, south and east coast
1492–1503	Columbus	Spain / Italian	Caribbean; South America, north shore
1497	Cabot	England / Italian	Eastern Canada
1498	da Gama	Portugal	India, west coast
1500	Cabral	Portugal	Brazil
1501	Amerigo Vespucci	Portugal / Italian	South America, east coast
1512–1513	Ponce de Leon	Spain	Florida
1519	Cortés	Spain	Mexico
1519–1522	Magellan	Spain / Portuguese	First to sail around the world
1530–1533	Pizarro	Spain	Peru, western South America
1534	Cartier	France	Canada
1540–1542	Coronado	Spain	Santa Fe, New Mexico
1609–1610	Hudson	England	Hudson's Bay, Canada; Hudson River, New York



Map of the world, 1560. *Courtesy Corbis Digital Stock*

Portugal: "In search of Christians and of spices"[56]

The Portuguese sailed south down the west coast of Africa, around the Cape of Good Hope, and up the east coast of Africa. The monsoon winds steered them toward India, where they established a settlement on the west coast at Goa. They continued sailing east and arrived at what they called the Spice Islands (now Indonesia). They had just found a way to cut out the middlemen—the Medici of Florence, the Venetians, and the Arabs.

The Portuguese plan was to take control of the gold mines in Africa, and use the gold to pay for spices. But the gold wasn't in one or two large mines that could be easily controlled, and the Africans didn't want what the Portuguese had to trade; they wanted cloth from India. The Portuguese also failed to take over trade routes and merchant relationships that had been established by the Arabs because Arabs—and Islam—were too deeply entrenched, and because rumors spread that the Portuguese forced Muslims to eat pork. The Portuguese continued east, founding colonies at Goa on the west coast of India, and at Macao in southern China. In the 1540s, they sailed even farther east—to Japan.

JAPAN

Encounters with the Portuguese in the sixteenth century were the first inklings Japan had that civilizations existed that weren't Asian. The sixteenth century was also—maybe because of these encounters—a time of increasing nationalism in Japan. Warlords whose motto was "Rule the Empire by Force" waged war against foreigners and against their own people in the name of unifying Japan.

The Samurai in the Tea House

This new nationalism can be seen in the tea ceremony, which shifted in the sixteenth century from a borrowed cultural practice to a uniquely Japanese one. This occurred under the guidance of the greatest tea master of all, Sen Rikyu, who spent his life perfecting the tea ceremony (as

Holiday History

JAPANESE TEA CEREMONY

The tea ceremony is interactive art that heightens and involves all the senses. The first is smell. Incense is burning as you walk in. Then you hear a whisper like a gentle breeze in the trees—the flame under the teakettle. A flower arrangement (a new art in the sixteenth century) soothes your eyes. As you sit on the straw tatami mat on the floor, you are aware of the feel of your silk kimono brushing against your skin. You watch the movements of the tea master as he offers tea to Buddha. Then you drink a bowl of thick, bracing, bitter green tea.

The food is a series of small courses called *kaiseki*, from the words that mean "sitting together." It "is the flower of the Japanese cuisine," as Jennifer Anderson states in her book, *An Introduction to Japanese Tea Ritual*.[57] The food is simple and simply prepared, with a concentration on the quality of the ingredients, on presentation, and on the spirit in which the food is offered and consumed. It can begin with a drink of ice water, hot water, chrysanthemum tea, plum wine, or *sake*—Japanese rice wine. These might be followed by two bowls, one rice and one *miso* soup. Then raw fish garnished with horseradish, edible chrysanthemum petals, and chrysanthemum greens. After more sake, the centerpiece is brought out on a separate tray, perhaps "a shrimp ball, a little piece of green *yuzu* citron, a leaf of spinach, and a *shiitake* mushroom in a clear stock of the best quality *dashi*."[58] A grilled course follows, either meat or fish like barracuda. The meal ends with a broth made of brown rice and salt water accompanied by pickles. These foods are served with much politeness and bowing. They are eaten with new chopsticks.

people still do). Sen Rikyu returned to the Way of Tea and its four principles: reverence, respect, purity, tranquillity. He replaced the elaborate imported Chinese tea cups and Chinese vases made of semiprecious stone with modest Korean-made tea cups and simple bamboo baskets.[59] He also made the tea room smaller and more intimate, nine feet square. Then he put a rack by the door where the samurai had to hang their swords. But the sword had served a purpose at the table, as a divider to stake out personal space. A fan was substituted for the sword, which is why it is considered extremely aggressive to open the fan—the equivalent of brandishing a sword. The ritual of talking a walk around the gardens in the back of the tea room before the ceremony serves a similar purpose. It appears to be an appreciation of nature and part of the ritual, but it is also a look-see to make sure no one is lurking in the garden waiting to assassinate the unarmed samurai.[60] In the sixteenth century, the tea house was a masculine world: the tea master was a man; flower arranging—then, *tatebana,* now, *ikebana*—was a masculine art.

The tea room is a utopia. Nothing from the outside intrudes. The conversation in the tea house is about the tea house, the tea, the flower arrangement. This forces you to focus on what is in front of you, on the beauty in the simplest everyday things, on how the Zen of the tea ceremony is the harmony of the universe. When you come out, you are altered.[61] The tea ceremony is a flawless execution of the combination of art, food, and religion that began in cave paintings 35,000 years ago in Europe.

But when the samurai comes out of the tea house, he puts his sword on again.

Samurai Culture, Portuguese Cuisine

Into this atmosphere of Japanese nationalism the Portuguese arrived to trade and preach Catholicism. At first the Japanese were very interested in new technology the Portuguese brought with them—guns—and in the new religion. About 300,000 converted to Catholicism. But there were culture clashes: samurai culture was centered around the sword and swordcraft—skill in making and using swords. Killing from a distance held no heroism for people raised on the elaborate rituals and codes of honor based on man-to-man combat. The foreign technology and the foreign religion were banished from Japan. In 1587, Emperor Hideyoshi gave foreign priests twenty days to leave the country. He claimed that Catholics were persecuting followers of Buddhism and Shinto, and that Portuguese merchants were selling Japanese people into slavery. In the following decades, the choice for Catholics—foreign and native Japanese alike—was renounce their faith or be tortured to death. Thousands renounced, thousands died.

By 1639, about 100 years after the Portuguese arrived, Japan had followed China's example: it became a closed country. Contacts with for-

INGREDIENTS:

Portuguese / Hawaiian Sweet Bread (*Pão Doce*)

1 pint milk, scalded
2 packages yeast, or 2 yeast cakes
¼ cup warm water
8–9 cups flour
1½ tablespoons salt
4 eggs
1½ cups sugar
⅛ pound melted butter

eigners were restricted to one city, Nagasaki; it was illegal for Japanese to leave the country and for Catholics to enter it. Japan stayed closed for more than 200 years, until people from a country that didn't exist in 1639—the United States—arrived with warships and forced it open.

The Portuguese didn't have much influence on the cultures of the countries they went to, but they influenced the cuisines, and were influenced by them. To Goa, their colony in India, they introduced spicy vindaloo—in Portuguese, *vin de alho*—vinegar. Curries from Goa still show up in Portuguese cookbooks. To Japanese cuisine, they contributed the battered and fried foods called *tempura* and the word for bread—*pan*[62] (as in *panko*—Japanese bread crumbs).

In the area around modern Singapore, there still exists a Chinese-Malaysian cuisine with a Portuguese name, *Nonya*, Portuguese for "grandmother," because it is rustic home cooking, like a noodle soup with tofu and coconut milk, called *laksa*. Portuguese sweet bread, *pão doce,* went around the world, too. Along the way, it became Hawaiian sweet bread, and ended up in North America in New England.

The sixteenth century was also a difficult time for the Catholic Church in Europe, where reformers were finally succeeding.

EUROPE

Germany: Martin Luther and the Protestant Reformation

In 1517, the pope declared an Indulgence Jubilee, which was a marketing ploy to raise money because he wanted to remodel his church, St. Peter's Basilica in Rome. It was the last straw for a monk in Germany. He finally put down on paper what many people were thinking. On October 31, 1517, Martin Luther nailed a list of ninety-five faults

he found with the church to the door of the cathedral in Wittenberg, Germany. He said that the selling of indulgences had to stop, and that it would cut down on immorality if priests were allowed to marry and lead normal lives. After Luther's Ninety-Five Theses, as they became known, went to a printer, copies spread like wildfire through northern Europe. At first the Church ignored its wayward son; he was a nuisance, nothing more. But Luther had hit nerves; people began leaving the Church and worshiping Christ in other ways. The pope excommunicated Luther, which meant that he couldn't receive the sacraments so he couldn't get into heaven. Then German princes who sided with the pope declared Luther an outlaw: no one was to give him food or shelter. Other princes shrewdly realized that anything that pulled people away from the Church gave them more power. These princes shielded Luther, who spent the next two years in hiding, translating the Bible from Latin into German so more people could read it. When Luther went back to Wittenberg, he found that many priests had gotten married and were wearing everyday clothes.



Europe around the time of Martin Luther. *Courtesy Corbis Digital Stock*

"God doesn't care what you eat"—Martin Luther[63]

Martin Luther changed not only the way Europeans worshiped, but also the way they ate. The Reformation freed a large part of Europe's population from the Catholic Church's food rules regarding fast days, meatless days (Wednesday and Friday), and saints' days, which accounted for approximately 150 days a year. International trade had brought about a higher standard of living, and people wanted to enjoy it without feeling guilty. There was an immediate drop in the number of fishermen in Europe and an increase in meat eating. The English ate so much meat that the Portuguese called them *rosbifes*—"roast beefs."[64] Luther also made one of the first mentions of a food new to Europe, the turkey. To this day, Protestants show their contempt for the leader of the Catholic Church by referring to the turkey tail—the "part that goes over the fence last"—as the pope's nose. Catholics return the favor and call it the parson's nose.

Switzerland: Purity

Once Luther broke from the Catholic Church, there was nothing to stop anybody else from inventing their own religion, and many did. The city of Geneva, Switzerland, became a Protestant utopia under the leadership of John Calvin and the new religion named after him, Calvinism. People moved there from all over Europe to practice the new, pure religion. (Calvin's followers in England were called Puritans.) Wife beating was outlawed, as well as inviting someone to have a drink, being drunk, having a tavern open during the sermon, being in a tavern during the sermon, or having a "great feast." The "great feast" fine was more than three times as much as the other food fines.[65]

Italy Comes To France: Forks and Catherine de Medici

Other European countries, however, were still enjoying the "great feast," but in new ways. Beginning in the sixteenth century in Italy, a new utensil changed the relationship of humans to food, and to each other at the table. The fork created a distance between the diner and his dinner. It also distanced the people eating from each other. No more eating the same food out of the same pot, with the same utensil—their fingers—as they had in the Middle Ages. The fork had been known as a serving tool since ancient Rome, used to spear solid food out of the boiling pot. It arrived at the table as a serving tool to keep the hands of all the diners out of the serving dish. Finally, it became an individual utensil. At first, people had to make a serious effort to use it, because it was two-tined, difficult to maneuver, and not as efficient as fingers. Food kept falling off. The fork also cut out one of the sensations that had always been involved with eating: feel. Slowly, it spread from the Italian court to France, then England, and

finally Germany. It was strictly upper class, crafted from gold, silver, or crystal. Since primitive people had just been discovered in the Americas, civilized people didn't want to eat like them. One of the means by which the fork began its northward migration was a teenage girl.

Food Fable

CATHERINE DE MEDICI—DID SHE OR DIDN'T SHE?

In 1533, a fourteen-year-old princess left Florence, Italy, to marry a French prince, in a marriage arranged by the pope. Catherine brought her cooks, pastry cooks, confectioners, and distillers with her. She supposedly introduced frozen ices, artichokes, parsley, and the fork to France. Some food historians believe this heralded the end of spicy medieval cooking and the beginning of French *haute cuisine* based on Italian *alta cucina.*

Food historian Barbara Wheaton states that this is incorrect because "French *haute cuisine* did not appear until a century later and then showed little Italian influence; and there is no evidence that Catherine's cooks had any impact on French cooking in the early sixteenth century."[66]

Wheaton says further that Catherine didn't have much power at court because she didn't have children for fourteen years; because her husband was not supposed to become king, but his brother died; and because her husband's mistress set court fashions.[67]

Later, after Catherine's husband died and she ruled through her son, her court was the height of fashion. In 1581, she was responsible for the first real ballet, the *Ballet Comique de la Reine*—the "Queen's Comic Ballet." She also helped to popularize a new fashion from the New World—tobacco. The active ingredient in tobacco, nicotine, was named after the French diplomat who sent the seeds to Catherine, Jean Nicot.

Catherine survived and even excelled in the backstabbing world of court intrigue. She was involved in the religious wars between the Catholic majority and the Protestant minority, the Huguenots. On St. Bartholomew's Day, August 24, 1572, French Catholics began a three-day coordinated massacre of 20,000 Huguenots throughout France, after which the pope and King Philip II of Spain celebrated. Catherine was not an innocent bystander.

Italy Comes to Poland: Vegetables

In 1518, another Italian princess, named Bona Sforza , also entered into a politically arranged marriage. Hers was to Poland's King Sigismund,

twenty-seven years older than she. Bona Sforza, like Catherine, brought her cooks and gardeners to her new country. Although Polish cuisine already included many vegetables, Bona Sforza brought so many new ones that the Polish word for "vegetables" is *wloszczyzna,* which means "things from Italy." The chart shows some of them, along with other Italian food words:

Polish and Italian Food Words[68]

English	Polish	Italian
artichokes	karczochy	carciofi (car CHAW fee)
asparagus	szparagi	sparagio
beans	fasola	fagioli (fah JO lee)
cauliflower	kalafjory	calvofiore
chestnut	kasztanowy	castanza
cutlet	kotlety	cotoletta
marzipan	marcepanowy	marzapane
meatball	pulpety	polpette
soup	zupa	zuppa
spinach	szpinak	spinaci
tomato	pomidorowa	pomodoro

Other foreign foods later incorporated into Polish cuisine kept their names, too. From France came *sos* (sauce), *krokiety* (croquette), *auszpik* (aspic), and soufflé. The Byzantine and Middle Eastern influence shows in *ryż* (rice), and *szaszlyk* (shashlik).

Elizabethan England: Shakespeare and the Dining Room

England became Protestant in 1531 under the rule of Henry VIII, a king of enormous appetites of all kinds. He was a notorious glutton, and ended up being married six times. Henry's desire for a son and heir, and the pope's refusal to allow him to remarry, made them enemies. Henry convinced Parliament to pass a law saying that the king was the head of the Church in England, and then he seized all the Church's property in England—about twenty percent of all the land in England. Henry finally got his male heir, but ironically, it was the daughter he didn't want who became one of England's greatest rulers.

Queen Elizabeth I of England was born in 1533, the same year that Catherine de Medici got married. Elizabeth ruled England from 1558 to 1603, and her reign was a time of glory for England. Theater and poetry flourished, especially at The Globe Theater in Stratford-on-Avon, where

plays by William Shakespeare were performed. The new sea routes to Africa, India, and Asia, pioneered by the Portuguese, brought a rise in the standard of living and a change in eating habits to England. An Elizabethan house might have a separate room for dining, with a table that had leaves under it that could be drawn out to make the table larger—a draw-leaf table. They had pots and pans for boiling and frying, but hollowed-out vegetables made cases for puddings. Utensils were made of silver, but only spoons and knives—real men didn't use forks: "When we have washed our hands . . . we need no little forks . . . to throw our meat into [our mouths]."[69]

Their meats were chicken, capon, goose, turkey, mutton, and steak, as well as game—deer, boar, swan. They ate many birds that we no longer eat, like larks and sparrows. Elizabethans ate all parts of the animal, including sweetbreads, rabbit livers, sheep tongues, pig feet, veal kidneys. These dishes were spiced with pepper, nutmeg, cinnamon, ginger, and rosewater, and sweetened with currants, dates, "raisins of the sun," and white sugar. Stockfish—dried cod—was prepared this way, too. So was eel. Sauces still showed the influence of the Middle East and the Middle Ages: sweet and sour, sugar mixed with vinegar and sometimes mustard.[70] Sugar was in everything, because the doctors at the time decreed that sugar was nutritious.[71]

Sometimes these ingredients were made into Elizabethan favorites—puddings and pies. The seasonings were the same; the difference was that puddings had an egg binder, while pies were baked into a very stiff, freestanding dough called a *coffin*. It was at this time that mincemeat pie became a Christmas standard. Today's mincemeat still contains Middle Eastern spices, but usually not the chopped meat and suet (fat) it had in the sixteenth century. One of the most famous pie presentations is in a nursery rhyme that children still learn today:

> Four-and-twenty blackbirds baked in a pie.
> When the pie was opened the birds began to sing,
> Oh wasn't that a dainty dish to set before the king?

This isn't a fairy tale—they really made pies with live birds. The recipe used in England was originally from *The Art of Cooking*, by Platina/Maestro Martino, published in Italy around 1474.

Queen Elizabeth I spoke fluent Italian, and Elizabethan food shows the influence of Middle Eastern foods, via the Italians—artichokes, spinach, raisins. Another Italian influence was their wineglasses, which were handmade and mouth-blown Murano glass from Venice. The Venetians had also learned to make glass clear *(cristallo)*, in colors, and etched. Also much in demand were foods cooked "in the French fashion"—usually with broth, wine, and light on spices (just nutmeg)—which would be written about in 1651 in the groundbreaking cookbook by La Varenne, *Le Cuisiner françois – The French Cook*.

RECIPE:

Pie with Live Birds

"Make the coffin of a great Pie . . . in the bottome whereof make a hole as big as your fist . . . Let the sides . . . bee somewhat higher than ordinary Pies, which done, put it full of flower and bake it [*i.e.,* bake it blind], and being baked, open the hole in the bottome, and take out the flower." The hole is plugged up with a real pie, and then put "round about the aforesaid Pie as many small live birds as the empty coffin will hold . . . " Then the pie is brought to the table and when the top crust is removed, "all the Birds will flie out, which is to delight and pleasure shew to the company."[72] (So much for sanitation.)

Elizabeth was a political genius. During her reign, there was no war in England between Catholics and Protestants, although a civil war erupted after her death. Perhaps one of the reasons was that in the sixteenth century, England faced a powerful external enemy: Spain. And Spain was becoming very angry about British piracy in the Caribbean.

Mercantilism, Religion, and the Spanish Armada

Sugar, wine, other foodstuffs, and slavery were part of an economic system called mercantilism. This was based on a country having a favorable balance of trade—more money coming into the treasury than going out. Economically, it was the end of feudalism and the beginning of capitalism, the accumulation of private wealth. Colonies were an important way to achieve this. They provided the home country with cheap raw materials that the home country then sold at a higher price or transformed into finished goods like textiles and then sold back to the colony. So in the sixteenth century, hundreds of huge cargo ships, Spanish galleons, sailed across the Atlantic Ocean loaded with sugar, wines, gold, silver, and jewels. The heavily laden, slow moving galleons were tempting targets and an easy way for other countries to get rich without spending much money. There were some pirates, renegades who belonged to no country, but most of the pirates were in the service of Spain's enemies—other European countries, especially England. Any country that could hijack or smuggle any valuable commodity did. They were all pirates in the Caribbean.

The piracy reached an intolerable level when sugar cost less in England than it did in Spain or even in the Caribbean. King Philip II of

Spain complained repeatedly to England's Queen Elizabeth I, who condemned pirates like Francis Drake in public but rewarded them in private. In addition, Catholic Spain hated Protestant England and its Protestant shipbuilding ally, the Netherlands, which Spain had owned until they revolted. Spain began building a huge armed fleet—in Spanish, an armada—to attack England. The pope promised Spain a huge cash bonus when it invaded England and brought it back to the Catholic Church (and restored his property). Spain felt certain of success, because along with Venice and the pope, it had defeated the Ottoman Turks in 1571 in the Battle of Lepanto—"the most spectacular military event in the Mediterranean during the entire 16th century"—for control of trade in the Mediterranean.[73]

In July 1588, the Spanish Armada arrived off the coast of England. But the British won. The decisive factor wasn't men or ships; it was nature. A violent wind came up and scattered the Spanish fleet. The British claimed that "the Protestant wind" showed that their God was more powerful than Spain's (just like when the Mongols tried to invade Japan three centuries earlier). The British victory broke the Spanish stranglehold on sailing in the Atlantic Ocean and allowed the British to do something they had wanted to do for a long time: colonize in North America.



Sixth Course

Thanksgiving, *Hutspot*, and *Haute Cuisine*: SEVENTEENTH-CENTURY AMERICA, THE NETHERLANDS, RUSSIA, FRANCE

COLONIAL AMERICA

The Chesapeake: The Starving Time

England's colonies in North America did not get off to a good start. After one, Roanoke, completely disappeared (historians still don't know what happened to it), British settlers came to the Chesapeake Bay in 1607. They named the colony Virginia in honor of Elizabeth I, the Virgin Queen; they called the capital Jamestown after King James; and they expected to get rich quick—except that the natives refused to be their slaves. In the winter of 1609–1610, when not enough food had been grown, harvested, or preserved, almost all 500 colonists died during what became known as "The Starving Time." Captain John Smith (yes, as in John Smith and Pocahontas) later wrote what he had heard about how the colonists were reduced to eating nuts, berries, acorns, horse hide, and worse:

> And one amongst the rest did kill his wife, powdered [salted] her, and had eaten part of her before it was known, for which he was executed, as he well deserved. Now whether she was better roasted, boiled, or carbonadoed [broiled], I know not; but of such a dish as powdered wife I never heard of.[1]

It was not the last time cannibalism would be resorted to in America.

The Chesapeake: Tobacco

Later Virginians wanted to grow a profitable crop; they tried sugar but the climate was too cold. They settled on a crop native to America: tobacco. Soon, tobacco was bringing in so much money that people planted it on any available land—they ripped up their gardens, grew it between graves. But who would hoe and harvest these thousands of acres of tobacco? The Native Americans who didn't die of European diseases refused to do it. African slaves were too expensive, although some arrived in 1619. England had the perfect labor force: a surplus of poor, desperate young men in their late teens and early twenties. They signed an indenture—a contract—giving them a free trip to America and free room and board in exchange for four to six years of work. Then they were supposed to get their freedom, tools, corn, and land of their own—something they had zero chance of getting in England. The person who hired the indentured servant and paid for his trip received free labor and fifty acres of land. It was a sweetheart deal all around. Except—

Most of these young men didn't live four years after they got to America. They died from dysentery, typhoid, malaria. The ones who did live found that there was only one woman for every six men. And soon the best land was in huge plantations owned by a few wealthy men who also had all the political power. In 1676, when ex-indentured servants couldn't get land, women, or the vote, they went on a rampage. Bacon's Rebellion ended with Jamestown burned and more than twenty ex-indentured servants hanged. Planters wanted a labor force they could control, not these Englishmen who used violence to get their rights. In 1698, England ended the Royal African Company monopoly on the slave trade. Now, anyone with a ship could get into the slave trade. With competition, the price of slaves dropped. Now it was affordable to own Africans and very profitable to sell them.

The Carolinas: West African Rice Culture

At about that time, the English established a colony south of Virginia—Carolina, named after King Charles II. Many of the settlers were from Barbados. They intended to grow food for the Caribbean sugar plantations and to grow and export luxury items, but after failing at wine, olive

oil, and silk, they decided on rice as their staple crop. Rice requires skilled labor; west Africans, especially from Guinea, had this skill—African women. They also had some immunity to malaria. But most importantly, they weren't Christian, so according to the Christian world at that time, they could be enslaved for the rest of their lives. The white Carolina settlers also imported the Barbados Slave Code, with punishments that escalated from whipping to facial mutilation and sometimes death, which the Code said was the slave's fault for forcing his master to discipline him. Charleston, South Carolina, became the primary port through which slaves entered the United States. By 1710, black slaves outnumbered white settlers in the Carolinas.

In spite of the conditions under which the slaves were brought to America, some of their African cuisine and culture survived. As Judith Carney points out in *Black Rice,* "Rice cultivation in the Americas depended upon the diffusion of an entire cultural system, from production to consumption."[2] And a grueling system it was, with a high mortality rate. There was no off-season; slaves worked year-round. First they sowed the seed. Then the fields were flooded, drained, hoed, and weeded. This was repeated four times. Finally, the rice was harvested with a sickle. Then it "required milling, threshing, winnowing, and pounding" *by hand* using a mortar and pestle—millions of pounds. And it had to be done on a tight timetable, because prime season for rice was Lent in Europe. Then the stubble from the harvested rice had to be plowed under and the fields prepared for the next crop.[3]

This influenced how cooking developed in the American South, too, because in the African rice culture, "only women are involved in the processing and cooking of the cereal."[4] African women became cooks in the plantation households. Along with their knowledge of rice cultivation, cooking, and storage, they brought yams, okra, watermelon, and fried

RECIPE:

Hopping (or Hoppin') John

"One pint of red peas, one pint of rice, one pound of bacon—let the bacon come to a boil in two quarts of water—skim it—add the peas: boil slowly. When tender, add the rice: let it boil until the rice is well swollen and soft.—Season with red pepper and salt. If liked perfectly dry, it can be steamed, as in boiling rice plain. Serve it with the bacon on top. Salt must be added when nearly done.—Theresa Brown, in *Modern Domestic Cookery,* Charleston, 1871."[5]

food. They also brought back foodstuffs that had been taken from the New World to Africa, like the chile pepper and the peanut, and their word for it—*goober*. They brought the banjo and the drum and the music that would become jazz. Some of the African cuisine they brought, including the rice itself, had been introduced to Africa by Arab Muslims. As Karen Hess reveals in *The Carolina Rice Kitchen: The African Connection,* many rice dishes in the American South are African versions of pilau or pilaf. One of the most famous is "Hoppin' John," eaten on New Year's Day to bring good luck. Other versions call for cowpeas, pigeon peas, black-eyed peas, or other peas/beans.

New England: "Almost beyond believing"[6]

In 1620, Pilgrims—Protestants who wanted to be allowed to worship without being persecuted—landed at Plymouth, Massachusetts. Before they went ashore, the men on the ship entered into an agreement. The Mayflower Compact was the first constitution in America. Only one paragraph long, it set forth an important principle: that all would be equal and work together as a community.

The Pilgrims, and the Puritans who settled the Massachusetts Bay Colony in Boston ten years later, had their work cut out for them. These were people used to living in towns. They didn't know how to hunt or fish or farm. But they didn't like many of the strange plants and animals in North America anyway—those huge quahog clams, the slimy steamers. And the codfish and lobsters were bigger than they were, sometimes six feet long. They wouldn't eat it at first, even after the Indians showed them how.

Food Fable

SQUANTO AND FISH FERTILIZER

"Contrary to what American myth has long held, it is quite unlikely that alewives or other fish were used as fertilizer in Indian fields, notwithstanding the legendary role of the Pilgrims' friend Squanto in teaching colonists this practice. Squanto probably learned the technique while being held captive in Europe, and if any Indians used it in New England, they did so in an extremely limited area. Having no easy way to transport large quantities of fish from river to field, and preferring quite sensibly to avoid such back-breaking work, Indians simply abandoned their fields when the soil lost its fertility. . . . Fertilizing fields with fish, as the English eventually did, seemed to Indians a wholly unnecessary labor."[7]

Maple Syrup: Tapping the Sap of the Sugar Tree

Maple sugar was a primary food in Native American cooking; among some tribes it was the only condiment. It replaced salt, which they did not like; was used to season dried cornmeal porridge; mixed with bear fat as a sauce for roasted venison; sprinkled on boiled fish; and eaten with berries or all by itself, a pound a day.[8] It reconstituted into a sweet drink that was used in ceremonies, along with tobacco smoked in the peace pipe. Women boiled the sap from maple, walnut, hickory, box elder, butternut, birch, and sycamore trees down to sugar crystals, which was difficult because before Europeans came, they had no metal pots. Their vessels were made of birch bark or gourds which held between one and two gallons and could not be placed directly over fire. To boil liquid in these containers, they dropped heated stones into the liquid until it boiled, which involved continuously taking out cool stones and replacing them with hot ones. These small amounts of liquid were then poured into 100-gallon moose-skin vats. It is not surprising that the Indians began to trade for metal pots and utensils as soon as the Europeans introduced them. Another way to process the syrup was to let it freeze at night, then scrape the ice off the top. This required several nights until just syrup was left. Maple sugar that was to be used for gifts was poured into molds that one European described as shaped like "bear's paws, flowers, stars, small animals, and other figures, just like our gingerbread-bakers at fairs."[9]

Seventeenth-century European writers give Native Americans full credit for knowing how to make maple syrup and sugar, but in the eigh-

Holiday History

MAPLE MOON

"Maple Moon" was what Native Americans called the time in the spring when the sap started to flow in the sugar maple tree (*Acer saccharum)*. Just as the grapevine was a symbol of resurrection for the ancient Greeks, so the maple was for Native Americans. Flowing sap meant the end of winter and the rebirth of nature. The Iroquois performed a religious ritual, a maple dance, to pray for warm weather and plenty of sap. According to legend, an Iroquois chief pulled his tomahawk out of a tree where he had thrown it the night before and went off to hunt. In the meantime, the weather turned warm and sap oozed into a container left by accident at the base of the tree. On her way to get water for cooking, his wife saw the container of liquid and used that instead; everyone agreed it was much better than water.[10]

teenth century, Europeans started to claim that they taught the Indians. As maple historians Helen and Scott Nearing have pointed out, language is on the side of the tribes. All their words for maple syrup translate as "drawn from wood," "sap flows fast," "our own tree," while they called white sugar "French snow"—a clear indication of its origin.[11]

Nevertheless, with the help of the native tribes, the Pilgrims survived their first year and had a celebration.

Thanksgiving Foods

> "The turkey is certainly one of the most delightful presents which the New World has made to the Old."
>
> —Brillat-Savarin[12]

Most of the foods Americans eat at Thanksgiving dinner now are native to the Americas: turkey, cranberry sauce, mashed potatoes, sweet potatoes, cornbread stuffing, pumpkin pie. In French the word for turkey is *dinde*, short for *poulet d'inde*, which means "chicken from India," because the French, like other Europeans, thought the turkey was from the Indies. Geese, ducks, and other wild fowl were abundant in the New World, but turkeys don't migrate, so they were available all year. And they had an instinct that helped humans: when one turkey was shot, the others froze in place. It was easy to kill a dozen turkeys in a morning. Nobody ever called anybody a turkey and meant it as a compliment.

Although Thanksgiving foods are native to the Americas, the style of the food was English. The turkey was popular in England before the Pilgrims came to Massachusetts in 1620. And although pumpkin was unknown in other parts of the world, other members of the squash family were. And pies were a favorite food in England from the Middle Ages. Potatoes, native to Peru, which was a Spanish colony and England's enemy, went from Peru to Europe and then to New Hampshire with Scotch-Irish settlers in 1723. They probably brought not just the potatoes, but the practice of mashing them with milk or buttermilk.

Cranberries and blueberries, both members of the heather family and both native to New England, were more than food in sauce and pies. Mashed and mixed with sour milk, they were used as paint. That is why the colors most often associated with colonial New England buildings are muted cranberry and milky purple-gray.

Although pumpkin was widely used in the colonies, recipes for pumpkin pie didn't appear in print until the first American cookbook, written by Amelia Simmons in 1796. She called it "pompkin" and gave two different versions. Both had pumpkin, ginger, and eggs, but one used cream and sugar; the other, milk and molasses. One used the Old World spices mace and nutmeg; the other, New World allspice.[13]

Potato Chronology

Date	Place	Event
1537	Colombia	Spanish conquistadores eat potatoes for the first time.[14]
1550s	Spain	Returning conquistadores introduce potato.[15]
1586	England	Chef to Queen Elizabeth I serves potatoes: cooks leaves, throws potatoes away.[16]
1590	Italy	Pope gives potatoes to botanist Clusius, who paints first pictures of potato.[17]
1600	France	Potatoes introduced from Switzerland.[18]
1615	India	Potatoes introduced (possibly).[19]
1651	Germany	Government forces people to cultivate potatoes.[20]
1660–1688	Ireland	Potato cultivation spreads rapidly; population rises from 500,000 to 1.5 million.[21]
1662	England	Britain's Royal Society sponsors cultivation of potatoes.[22]
1672–1725	Russia	Czar Peter the Great introduces the potato.[23]
1719	North America	New Hampshire—Scotch-Irish settlers bring first potatoes to North America from Europe.[24]
1748	France	Parliament declares potatoes cause leprosy, forbids growing them.[25]
1760–1840	Ireland	Population increases 600 percent, from 1.5 million to 9 million, subsists primarily on potatoes.[26]
1756–1763	Poland	Potatoes reach Poland during Seven Years' War.[27]
1763	France	Army pharmacist Parmentier promotes potatoes after eating them while a prisoner in Germany during Seven Years' War.[28]
1764	Sweden	Government promotes potato growing.[29]
1770	Australasia	Captain Cook introduces potato.[30]
1780s	France	King Louis XVI grows potatoes in Neuilly. Parmentier sends guards to make potatoes seem valuable; peasants steal the potatoes and plant them, which was Parmentier's goal.
1793	France	*La cuisine républicaine*, first French cookbook written by a woman, Mme. Méridot, is all about potatoes.[31]
1835	France	Carême includes recipe for English-style potatoes—mashed—in *The Art of French Cooking*.[32]
1830	Belgium	Potato fungus—*Phytophthora infestans*—originates.[33]
1837	France	Soufflé potatoes created by accident when desperate chef fries potato slices twice.[34]
1845	Ireland	Potato fungus wipes out crops.[35] One million Irish die; others leave.
1850s	U.S.	Legend: potato chip invented in Saratoga, New York by African-Native-American cook
1873	U.S.	Luther Burbank "builds" a better potato; becomes Idaho potato
1920s	U.S.	Soldiers return from WWI with a taste for French fries
1986	World	The potato is one of the four most important food crops; staple for 200 million people.[36]

Holiday History

THANKSGIVING

The first Thanksgiving was in 1621. Fifty-one Pilgrim men, women, and children hosted ninety men of the Wampanoag tribe and their chief, Massasoit. It was in the fall, to celebrate the good harvest of corn (wheat and barley weren't as successful). The celebration lasted three days. There was "wild fowl," and five deer.

The idea of a national day of thanks was raised in the late 1700s with the first president, George Washington, who proposed November 26 as the date. Nothing came of it until the 1850s, when magazine journalist Sarah Josepha Hale rallied the women of America to pressure the president for a national holiday. In 1863, during the Civil War, President Lincoln declared that the last Thursday in November should be a day of giving thanks. It was the same year that Lincoln issued the Emancipation Proclamation freeing the slaves, and made his speech at the battlefield in Gettysburg, Pennsylvania, in which he said the famous words, "that government of the people, by the people, for the people, shall not perish from the earth."

In 1939, President Franklin D. Roosevelt wanted to extend the Christmas shopping season to give the economy a boost and help it recover from the Depression. He moved Thanksgiving one week earlier. Congress objected. The president and Congress did a tug-of-war over the date until 1941 when it was settled: Thanksgiving is the fourth Thursday in November.

In 1970, Wampanoag leader Wampsutta (Anglo name: Frank James) was invited to speak at the Thanksgiving celebration at Plymouth, Massachusetts. When word got out that his speech was about the oppression of Native Americans, the invitation was revoked. He gave his speech anyway, in front of the statue of Massasoit, overlooking the replica of the *Mayflower*. That was the first Native American National Day of Mourning for the culture, the religion, and the lives and lands of their ancestors.

(To find out more about Thanksgiving, log onto www.plimoth.org).

The Codfish

The staple "crop" in the Massachusetts Bay Colony was the codfish, *Gadus morhua*. What sugar was to the Caribbean and tobacco was to the Chesapeake, cod was to Massachusetts. There were millions off the coast, north to Newfoundland and Labrador. Once it was salted and dried, cod was stiff as a board and could be stacked and shipped like lumber. It was also almost eighty percent protein. In this form it made its way to Europe: *bacalà* in Italy, *bacalao* in Spain, *bacalhau* in Portugal. According to cod historian Mark Kurlansky, by the middle of the sixteenth century, "60 percent of all fish eaten in Europe was cod."[37] It was the

perfect food for Lent. The best grade was sent to Spain; the worst fed the slaves in the West Indies.[38] It could also be bartered for slaves in Africa. Shipbuilders got rich because of cod, too. The cod was so important to the economy of Massachusetts that a large carved wooden codfish hangs in the statehouse in Boston.

The American Culinary Tradition: Pocket Soup and Johnnycake

American cooking developed along two parallel lines. In the South, where slave labor did the kitchen work, cooking could take more time. Labor-intensive cooking, such as barbecue, could be done by slaves. Barbecue needed a great deal of preparation. Either beef or pork had to be properly butchered and marinated. Then the fire had to reach just the right temperature, and the meat had to be added. The fire had to be carefully watched and the temperature maintained. This required a great deal of labor. However, pit cooking developed differently in New England, in the form of the clambake. There, a fire was allowed to burn down in a pit; then clams, lobsters, and corn were buried under wet seaweed and left to steam for several hours. No labor was necessary to prepare the food before or after it was placed in the pit, except to dig it out.

American cooking in the North arose from the middle-class necessity of doing a great deal of work as quickly as possible. They invented shortcuts and new ways to preserve foods. Two examples are pocket soup and johnnycake. Travel was not easy in the colonies. Roads were poor or nonexistent and there was no guarantee that travelers would be able to find food when they needed it. Sailors, too, appreciated a bit of home. Pocket soup, also known as portable soup, was the solution. This was an early bouillon cube, soup cooked down until it was a condensed gelatinous mass, then cut into small cubes and dried for ten days. Dropped into a cup of water, it reconstituted into soup. Johnnycake or journey cake was a cornmeal cake that would keep without becoming moldy or disintegrating.

Another example of New England fast food was Hasty Pudding, made famous in the song *Yankee Doodle* (and in the Harvard University club). This was corn—called Indian or "Injun" meal—or rye meal cooked on top of the stove, not baked, so it was ready in half an hour. This is a long time by today's microwave standards, but the baking times for regular corn meal pudding recipes in *American Cookery* range from one and one-half hours to two and one-half hours. Sara Josepha Hale's recipes for cornmeal pudding require three to four hours of cooking, even those that are boiled. What makes Hasty Pudding hasty is that the meal is soaked first and added a bit at a time, and the pudding is boiled and stirred constantly. In this cooking technique, it resembles polenta.

Technology: Spider, Kettle, and Crane

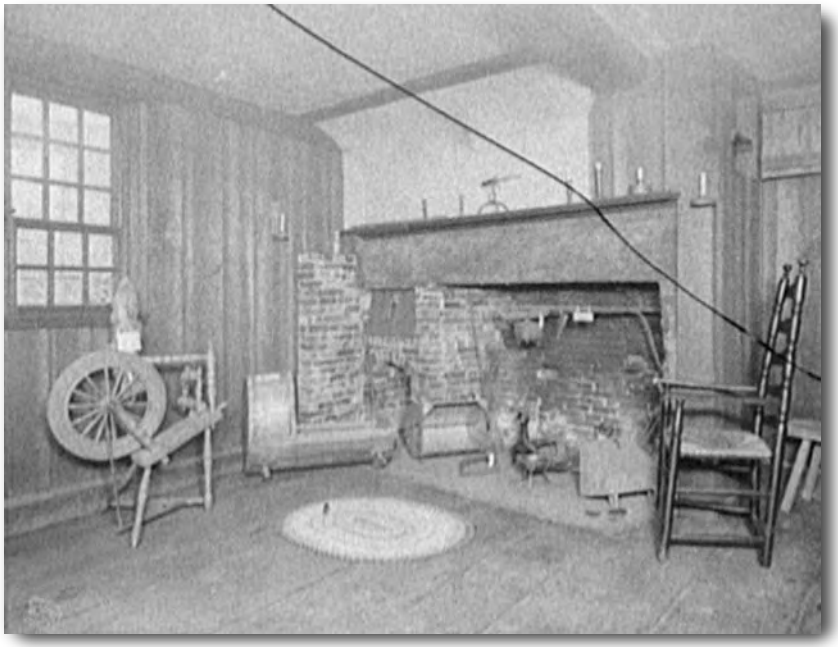
Early American cooking was open hearth. Cooks had three basic tools: the spider, the kettle, and the crane. The spider was a cast iron frying pan with three short legs to keep it from tipping over. The kettle, like the spider, was cast iron with three short legs for stability, because when it was full, it could weigh forty pounds. The crane was a metal swing-arm dripping chains of various lengths so that the kettle height could be varied. Foods that needed more heat could be at the bottom, closer to the fire, while foods that needed lower temperatures would be at the top.

Even with a crane, most cooking was done with the quadriceps, because it involved long hours of squatting in front of the open hearth to stir foods. A stool or rocking chair could be pulled up next to the fire, but it still involved long hours next to hot open flames. Sometimes women combined their three most important functions—cooking; spinning wool, cotton, or flax into yarn; and caring for children by putting the cradle in the kitchen.

Baking was done in a Dutch oven. This was not the wide pan we call Dutch oven now, but was closer to the *fogón* that Columbus and other sailors used on ships: a metal box that could be placed on the floor



Colonial kitchen with crane in fireplace. *Courtesy Library of Congress, Prints & Photographs Division, Detroit Publishing Company Collection, LC-D4-71183.*



Paul Revere's kitchen. *Courtesy Library of Congress, Prints & Photographs Division, LC-USZ62-113458*

of the fireplace. Some fireplaces had an oven built in at eye level—something that would not be available in American homes again until the 1950s. But temperature control was definitely an art, especially for baking. Goods had to be baked sequentially, not simultaneously, with the fire watched closely.

Brown Betty, Sally Lunn, and Anadama

Women, perhaps cooks, have left their names but not much other information on various foods. Brown Betty is a thrifty New England dessert that layers leftover bread with fruit, usually apples, and is baked. It isn't a bread pudding because it lacks eggs to make the custard binder. Sally Lunn is a very light, yeast-risen egg bread. Anadama is supposedly named after Anna, who kept cooking only one thing—a cornmeal and molasses bread—until her husband finally burst out, "Anna, damn her!"

"Beer is a good family drink"[39]

As food historian John Hull Brown points out in *Early American Beverages,* men, women, and children in colonial America drank alcoholic bev-

Culinary Confusion

COBBLER, SLUMP, GRUNT, DUMPLING, CRUMBLE, AND CRISP

Just as regional cooking developed according to the kind of produce and labor available in each area, different areas had different names for the same food. For example, in most of the country, a cobbler is chopped, sweetened fruit with a sweet biscuit dough baked on top. Except in New England, where it is called a slump, with the further exception of Cape Cod, where it is called a grunt. Other combinations of fruit and dough include dumplings, which are pieces of fruit or a whole fruit, like an apple, wrapped in pastry squares and baked. A crumble is a mixture of flour, butter, sugar, and seasonings like cinnamon and nutmeg crumbled over chopped fruit and then baked. A crumble is different from a crisp because a crisp has more butter, which makes the topping . . . crisper. The topping on a crisp sometimes includes oats.

erages. Beer, familiar from England, was the earliest drink in the colonies. Women were the brewers; they made beer from nearly anything that grew. They made vegetable beers from corn, tomatoes, potatoes, turnips, pumpkins, and Jerusalem artichokes. They made tree beers from the bark of birch, spruce, and sassafras, and from maple sap. Fruit-based beers were brewed from persimmons, lemons, raisins. There were herb beers using wintergreen, and spice beers made of ginger, allspice, and cinnamon. Even flowers became beer: rose beer. There was molasses beer. They made their ale two barrels at a time, from eight or nine bushels of malt, twelve pounds of hops, five quarts of yeast, and seventy-two gallons of water.[40] And, of course, just as in ancient Egypt, once they had beer they had leavening for bread, either from the beer itself or from the "leavin's"—the dregs. But the beer was bitter until the Germans arrived with new brewing techniques in the nineteenth century.

They also distilled "spirituous waters" and cordials using the stones of apricots, peaches, and cherries; and spices from the Middle East like coriander, cardamom, and anise seed.[41] The spices were kept in a spice cabinet. Wine was made from ginger, currants, and cherries; but sweet wines were imported from the "Wine Islands"—Madeira, the Azores, and the Canaries. Later, the Scots-Irish brewed whiskey from corn, barley, or oats. Colonial Americans drank hard cider distilled from apples, peachy made from peaches, and perry made from pears. The colonists liked to dress up their alcoholic beverages with cream, sugar, eggs, mace, and nutmeg—like eggnog.

"Kill-Devil" Rum, Stonewall, Bogus, and Flip

Rum, distilled in New England after 1670, was cheap and available. It was called by a variety of names—rhum, rumbullion, rumbooze—and used in a variety of mixtures: stonewall, which was cider and rum; bogus, unsweetened beer and rum; blackstrap, molasses and rum; and flip, a popular drink that appears at least as far back as 1690 in New England. Here's one way to make it:

RECIPE:

Flip

"An earthen pitcher or huge pewter mug . . . would be filled about two-thirds with strong beer to which would be added molasses, sugar, or dried pumpkin for sweetening, and New England rum, about a gill, for flavor. The bitter, burnt taste was gotten by plunging a red-hot loggerhead, an iron poker-shaped stirrer, into the flip making it bubble and foam."[42]

Punch, with its five ingredients of tea, arrack (alcohol often made from coconut palm or rice), sugar, lemons, and water, arrived from India via the British East India Company. New Englanders added a sixth ingredient, and rum punch was born. Life was good to New Englanders; they could expect to live ten years longer than if they had stayed in Old England. But since they attributed their longer life to drinking alcohol, it became difficult to enforce laws restricting its intake.[43]

THE SCIENTIFIC REVOLUTION

While its colonies were rural and agricultural in the seventeenth century, Europeans were making astounding discoveries in a time that came to be known as the Scientific Revolution. Scientists began to examine everything with a fresh eye, trusting their own observations, as Columbus had done. They, too, were rewarded by discovering new worlds. The telescope allowed them to see Earth's moon for the first time, and to discover Jupiter's moons. A Dutch draper named van Leeuwenhoek looked through the microscope and saw tiny new worlds in water and blood. The universe appeared orderly to physicists like Italy's Galileo and England's Newton, who discovered laws of motion and of gravity, and Boyle, the founder of chemistry. Sweden's Celsius and the Nether-

lands' Fahrenheit invented systems for measuring temperature, which would eventually allow cooking with precision. French mathematician Descartes stated the new scientific creed: "I think, therefore I am."

But these discoveries and all this new information challenged the authority of the Catholic Church. In 1633, they summoned Galileo before the Inquisition and found him guilty of heresy—speaking out against the Church. He was put under house arrest for the rest of his life. (The Church pardoned him in 1992.) This put serious limits on scientific investigations in the Catholic countries of southern Europe. But in Protestant northern European countries the Scientific Revolution was supported by the governments and flourished. In 1660, England established the Royal Society to advance science, and benefited mightily from its discoveries and inventions in the eighteenth century.

THE GOLDEN AGE OF THE NETHERLANDS

Between England's colonies in New England and the Chesapeake was the Dutch colony of New Netherland. The Dutch knew that they would have to entice people from other countries to settle New Netherland, because the Dutch people, prosperous and free to practice the religion of their choice, had no reason to leave their own country. The Dutch settlers who did go to New Netherland found oak trees that grew seventy feet high and made logs that burned hot and bright for hours. As in the Netherlands, bread was a staple in New Netherland, but it was baked at home. The Netherlands was urbanized, so commercial bakers made bread, but parts of the colony were very sparsely populated so it was necessary for people to have their own brick ovens built into the wall next to the fireplace. American ingredients like corn and pumpkin found their way into standard Dutch recipes like pancakes. Bread was more than food in the Dutch colony; it was a trade item so much sought after by the Native Americans—especially white breads and sweet cakes—that by 1649 there were laws against making bread to trade with the Indians.[44] New Netherland was just a small part of a vast Dutch Empire.

The Dutch replaced the Italians—the Medici of Florence and the Venetians—as the international bankers, and the world banking center moved to the Netherlands. The Dutch dominated or controlled the world shipping trade in spices, sugar, coffee, slaves, precious gems, and grain. Dutch ships also delivered oil, wine, and salt from Portugal, Spain, and France to northern Europe, and gold and silver from New World mines to Old World vaults. One of the reasons the Netherlands rose to power was that it was unique—a unified, religiously tolerant republic. During the sixteenth century, while the European monarchies fought with the Church and within their own countries over religion (and in some places,

killed a greater percentage of the population than the Black Death had), the Netherlands was open for business. Many of the Jews who had been driven out of Spain by the Inquisition went north to the hospitable Protestant Netherlands and contributed their knowledge of banking and business to an already flourishing economy. The stock exchange, called the Bourse (French for "purse"), was created in Amsterdam in the middle of the sixteenth century. In 1609, the Bank of Amsterdam opened. It had an international money exchange, used the system of writing checks invented by the Arabs in the Middle Ages, and the Dutch government guaranteed the safety of deposits—something not available in the United States until 1933. The Dutch *florin* was accepted as payment all over the world, much as the American dollar is today.[45]

"God Made the World, but the Dutch Made Holland"[46]

Dutch life was tied to the sea and was a constant battle with it. The Dutch invented windmills to pump water out of the fields and reclaim land from the sea, and dikes, walls to hold back the sea. The Dutch fleet of 10,000 ships brought salt, oil, and wine from southern France, Spain, and Portugal to northern Europe and carried grain back. They also carried gold and silver from the Americas. Much of Dutch food and industry centered around the sea. Twenty-five percent of the Dutch population was connected to the herring industry, from fishing to selling, and preserving by smoking, salting, and pickling.[47]

In a time when the economy of other European countries was suffering, the Dutch were extremely prosperous, with a large middle class and a high standard of living. Dutch virtues were cleanliness and thrift. Every morning, Dutch housewives washed not only their own stoops but also the public sidewalks in front of their houses. They lived and ate well. At fish markets, the Dutch bought only live fish. They threw away dead fish, as well as mackerel and red mullet.[48] Even workers could afford meat, cheese, and butter, and the urban poor were provided for in poorhouses that had been recycled from monasteries or convents when the Netherlands converted to Protestantism from Catholicism. Sailors on warships were fed a 4,800-calorie-per-day diet of mutton, beef, pork, smoked ham, bread, beans, peas, and smoked and pickled fish, much of it herring.[49] They were a country that grew no grain and made no wine, but they controlled trade from the breadbasket of Europe, the countries around the Baltic Sea.

Dutch Cuisine: *The Sensible Cook*

One Dutch cookbook was predominant in the Netherlands (and in New Netherland) in the seventeenth century. *The Sensible Cook*, published in 1668, contained 189 recipes and two appendices, "The Sensible Con-

fectioner" and "The Dutch Butchering Time." The cookbook and a beekeeping manual were part of the medical section of *The Pleasurable Country Life*, a manual for wealthy bourgeoisie who owned a country house and a garden. It was really a compilation of three books: *The Dutch Gardener*, about ornamental gardens; *The Sensible Gardener*, about medicinal gardens; and *The Medicine Shop or the Experienced Housekeeper*, about the care of humans and animals. None of the information in *The Sensible Cook* was available to English speakers until 1989, when it was translated by a Dutch woman, food historian Peter G. Rose. As she points out, the gender of the anonymous author of *The Sensible Cook* is unknown, but the book opens with a statement "To all cooks, male and female" and ends with the words "everyone to her own demand."[50] Before mentioning a word about food, the author tells the reader how to build a stove, one of the rare examples before the nineteenth century of being able to stand up and cook. The recipes are divided into sections: salads, herbs, and vegetables first; then meat, fowl, and fish; followed by baked goods, custards, drinks, and miscellaneous; then a section on tarts; and finally, one on pasties. The author was an organized person who took the trouble to capitalize the first letters of the main ingredients and to give exact measurements in *loot* (approximately fourteen grams), *pint* (approximately one-half liter), and *pond* (approximately 454 grams).[51]

The cookbook also shows the influence of the Middle East and the Middle Ages. Stews and sauces are thickened with bread, toast, ground nuts, eggs, or—a Dutch innovation—cookies. Sauces of sugar and verjuice or vinegar continue the sweet-sour medieval cooking tradition. The recipe "To make a proper Sauce" shows its Middle Eastern roots: ground almonds are added to the white bread crumb thickener, while sugar and verjuice make it sweet and sour. The only other ingredient is another Middle Eastern spice, ginger. There is little difference in the spices used for meat and for fish. Thirty of the fifty-nine recipes for meat use nutmeg and/or mace; so do ten of the eighteen fish recipes. For example, sturgeon is studded with cloves, spit-roasted, basted with butter, then stewed with Rhine wine, vinegar, cinnamon, and nutmeg.[52] Bream is also spit-roasted, stuffed with its own roe, chopped egg yolks, parsley, nutmeg, mace, pepper, and butter, then sauced with pan drippings, anchovies, and verjuice, and garnished with oregano.[53] Many of the recipes contain a butter enrichment at the end; a recipe for hen stewed with greens reminds: "Especially do not forget the butter."[54] Few of the desserts use nutmeg or mace; rosewater is still the flavoring. The Middle Eastern influence was also apparent in cumin-studded Gouda cheese, and in the lemons, oranges, and ginger in *hutspot* (hot pot), a seasonal meat and vegetable stew.

The Dutch ate four times a day—breakfast, the main meal at midday, afternoon (at 2:00 or 3:00 p.m.), and evening. They ate bread at all four meals: bread and butter, bread and cheese, bread and meat. It was

RECIPE:

Hutspot, the Dutch Dish

"Take some mutton or beef; wash it clean and chop it fine. Add thereto some greenstuff or parsnips or some stuffed prunes and the juice of lemons or oranges or citron or a pint of strong, clear vinegar. Mix these together, set the pot on a slow fire (for at least three and a half hours); add some ginger and melted butter."[55]

all washed down, any time of day, with beer. Bread was baked by professional bakers in communal ovens even if the dough was made at home because few people had ovens in their houses. Bread was the mainstay of the Dutch diet until the potato caught on at the end of the eighteenth century.[56] Rice was rare; there are only a handful of recipes in *The Sensible Cook*. There are also very few foods from the New World. The turkey makes an appearance, as do green beans, called "Turkey beans" because that is where the Dutch got them. But this was a time before the Dutch knew chocolate.

The Dutch displayed their wealth in the furnishings of their homes, their art, their gardens. They had Turkish carpets, Persian silk, Ming china (until Delft began producing homegrown Dutch knockoff blue ceramic tiles and tableware), lace, linens by the dozens for bed and table. They also adopted an idea from Topkapi Palace, the residence of the sultan of Turkey: gardens for no purpose except beauty, acres of gardens with not one edible plant in them, just flowers, especially tulips and especially red ones. The buying and selling of tulip bulbs was intense in the Netherlands, where fortunes were made and lost on just a handful of bulbs. Dutch art reflected Dutch life: secular, not religious. The still life paintings celebrated the new, exotic fruits—lemons, oranges, apricots—in settings of abundance and wealth.

All of this abundance presented a dilemma for the Dutch Reformed Church: were the Dutch going to be rich or religious? Were all these spices, sauces, and sugar, these cheeses and meats, all these possessions, the speculating in tulip bulbs, going to cause the Dutch to lose their souls? The response in some cities was sumptuary laws to regulate the sumptuousness—the luxury—of everyday life. For example, in Amsterdam in 1655, no more than fifty guests could be invited to a wedding, the celebration couldn't last longer than two days, and a ceiling was put on how much could be spent on gifts. Some city councils went too far and banned the December 6 festival of food and gift-giving in honor of

St. Nicholas—Sinter Klaas to the Dutch, Santa Claus to us—along with dolls and gingerbread men. It didn't last—the children rebelled.[57] While the Church continued to preach thrift, the Dutch made money and spent it—and consumed it. They never stopped eating their pancakes and waffles sprinkled with sugar or swimming in caramel. Before Americans invented baking powder, yeast inflated the waffles, but the pancakes were as flat as pancakes.

The Spice Islands: Nutmeg versus New York

Much of the wealth of the Dutch Empire came from its colonies in the Spice Islands, now Indonesia. In 1602, the Dutch East India Company was founded to trade in Asia. The Dutch East India Company, remote from the Netherlands, but having to make decisions for the good of the empire, became so powerful that it functioned like a state: it could coin money, make treaties, and raise its own army. Within a short time, the Dutch broke the monopoly the Portuguese had held on the nutmeg trade for almost a century.

The British were after the spice trade, too. In 1600, they had founded the British East India Company. Like Columbus, they were determined to find their own route to the East Indies. Their quest became more urgent when bubonic plague struck again in the 1660s and physicians believed that nutmeg, the seed of the *Myristica fragrans* tree (mace is the shell), was the cure. The maps of the time showed it was possible to get to the Indies by sailing north of Norway and then east—a Northeast Passage. Mistake. The crews starved or froze to death.

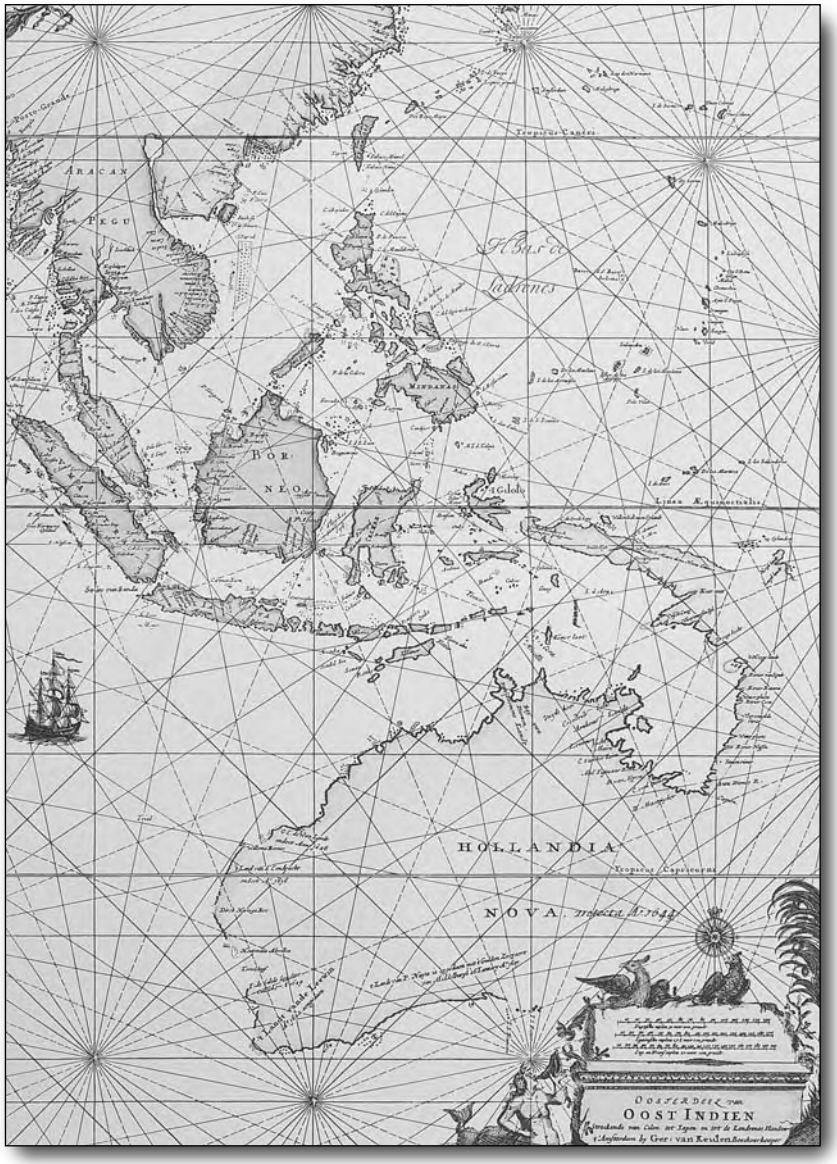
Determined to do business in the East Indies, the British went to war with the Dutch. They lost, then felt humiliated by the treaty, which gave the Dutch what seemed by far the better deal. The Dutch got to retain control of the lucrative Spice Islands trade, and all they had to give away was their puny colony in North America. The British tried to retain their pride and renamed the colony—New York.

But war wasn't the only deadly danger connected to sailing.

Scurvy, "the plague of the sea"[58]

In 1657, in the sparkling seas off of Acapulco, Mexico, a ship was drifting, bobbing with the waves, shifting with the wind. It was a ghost ship, the entire crew dead from scurvy.

Scurvy is a deficiency of vitamin C—ascorbic acid—which works with iron to make red blood. It also makes collagen, which holds tissue together. Unlike some animals, like horses, humans can't make or store vitamin C, so we have to eat or drink it every day. In the absence of vitamin C, the symptoms of scurvy can appear in little more than a month. They start with tiredness and muscular weakness; then new wounds fes-



Southeast Asia, Indonesia, and Australia, early 1600s. Note that Australia is called Hollandia Nova—New Holland. *Courtesy Corbis Digital Stock.*

ter and ulcerate instead of heal; old wounds pull apart; small pinpoint purple spots on the skin indicate internal hemorrhaging; the gums get sore and bleed; the teeth fall out; the eyes and nose drip blood; then death.

The Latin word for scurvy is *scorbutus*, so the foods that fight scurvy are known as anti-scorbutics. Anti-scorbutics are citrus (orange, lemon, lime, grapefruit); cruciferous vegetables (kale, broccoli, cauliflower, cabbage, brussels sprouts); and the nightshade family (green pepper, potato, tomato). There is the exact same amount of vitamin C in half a cup of broccoli and half a cup of orange juice—sixty-two milligrams. Half a cup of kale has almost fifty percent more than either—ninety-three milligrams.[59] It is not apparent to us now looking at this list of fruits and vegetables that they have anything in common; we know because vitamins were discovered in the 1920s. In the 18th and 19th centuries, all kinds of theories were put forward: the crew got scurvy because they hadn't been on land in a while; a piece of whale meat tied around a weak arm or leg would cure it; the acidity in certain foods counteracted scurvy. (Asians ate fresh ginger that they grew on their ships and didn't get scurvy.)[60]

In the eighteenth century, the British discovered that limes prevented scurvy—although they didn't know why—and made sure that sailors had them. In foreign ports, British sailors walked around sucking limes and became known, in an unflattering way, as "limeys." But scurvy continued to be a problem on ships even after its cause and cure were known. In the nineteenth century, a shortage of trees for fuel created a demand for whale blubber (fat). Whaling ships from England or New England that sailed for three or four years to the whaling grounds in the Pacific Ocean could never carry enough food and water; they had to rely on what they could pick up along the way. In the Galapagos Islands, west of Ecuador, they got giant 200-pound tortoises, which they somehow hoisted onto the ship, where they spent the time walking around—very slowly—until they were turned into stew. Sometimes sailors were able to buy sheep or other food animals. But the biggest problem, and what the men needed most, were fresh fruits and vegetables, because the greatest killer—"the plague of the sea"—was scurvy.[61]

THE RUSSIAN BEAR

Peter the Great Modernizes Russia

The Netherlands got a special visitor in the eighteenth century. Czar Peter the Great realized that if Russia didn't keep pace with Europe, it would be a huge, helpless giant and European countries would come scavenging and pick it apart like vultures. In his program to modernize Russia, Peter visited shipyards in the Netherlands, in disguise, which fooled nobody because he was six feet, eight inches tall and traveled with an entourage. Peter built a navy and upgraded the army. He hired European officers to train his men.

Peter wanted to make Russians behave, look, and eat like Europeans. Europeans read the newspaper, so Peter published Russia's first newspaper, editing it himself. (The newspaper, like the alphabet, was late getting to Russia.) European men were clean-shaven, so Peter taxed men's beards. But it was cold in Russia. Men were reluctant to part with their face-warmers and paid the tax instead. Peter had more success introducing European foods to Russia. He sent Russian chefs to European countries to learn the latest cooking methods. One of the things Peter found in Europe was the potato. Russia is now the world's leading producer of potatoes. The Russians used distilling techniques they learned from Poland to make potato-based vodka.

But to get a port on the Baltic Sea, Peter would have to go to war with Russia's neighbor, Sweden. Russia won the war, and Peter got his port. He built a magnificent city which he named St. Petersburg, after the first Christian saint, whose name just happened to be the same as his.

Sweden: Land of the Midnight Sun

In the seventeenth century, Sweden was a world power. It was rich in mineral wealth; a majority of the world's copper came from Swedish mines. A series of wars with Denmark had increased Sweden's size. It was becoming urban and had a distinctive cuisine. Rye and barley flour were made into crisp cracker-like breads. The seas provided herring, salmon, cod, and Arctic trout. Moose hunting was—and still is—a popular sport. The cold climate produced root vegetables like turnips, rutabagas, and kohlrabi. Lingonberries and cloudberries were favorites with humans and with bears. Swedish meatballs perhaps had their origins in Persian kebabs. Dumplings and soups were made of blood—beef, pig, goose.

Sweden had converted to Lutheranism in 1527 during the Reformation, but like many other European countries, still had saints that were too deeply ingrained in the culture to give them up, like St. Nicholas and St. Lucia.

The Sami: Reindeer Cuisine and Culture

Sweden's population growth in the seventeenth century pushed the native people farther north, up into the Arctic Circle, so close to the North Pole that the sun barely sets during the summer and barely shines during the winter. These are the nomadic Sami people, who used to be called Lapps or Laplanders, and whose territory stretched across northern Norway, Sweden, Finland, and Russia. Today, there are fewer than 30,000 Sami. The reindeer is central to their lives, the way the buffalo was central to the lives of Native Americans on the Great Plains. The reindeer

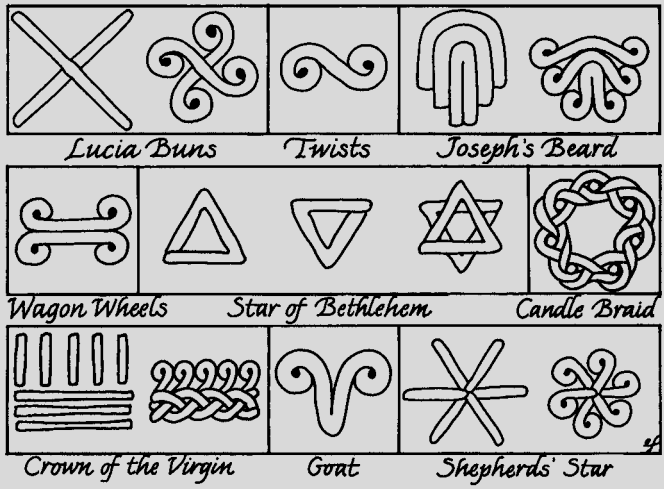
Holiday History

ST. LUCIA'S DAY
DECEMBER 13

Sweden's St. Lucia's Day—the Feast of Lights—is an example of fusion cuisine and culture: the celebration of a southern Italian Catholic martyr in a Scandinavian Protestant country on a Viking holiday, using Middle Eastern foods, Spanish spice, and Portuguese wine.

According to legend, Lucia was a young woman who fed sick, poor, homeless people in the third century A.D. in the Roman Empire. She fixed candles around her head to light her way when she visited these people in the catacombs—the underground cemeteries. When she was tortured and executed, supposedly on December 13, her legend spread. It caught the imagination of the Vikings, and is celebrated now on what was the shortest day in the Viking calendar. Today, young girls wearing long white dresses and a crown of candles get up before dawn and bring food and drink to their families. They also bring much-needed light and festivity to the long, dark Scandinavian winter, which doesn't end until April 30, which is celebrated with bonfires and the festival of *Walpurgis Night*.

The traditional foods are *Lussekatter* (Lucia cats)—yeast bread with saffron, raisins, and blanched almonds—and gingersnaps (in Swedish, *pepparkakor*—"pepper cake"). The beverage is *glögg,* a Port wine punch with Middle Eastern spices—cinnamon, cloves, cardamom, and ginger—sweetened with orange peel, raisins, and sugar.[62] The *Lussekatter* are formed into elaborate traditional shapes, as the picture below shows.



Lussekatter bun designs. *Drawn by Esther Feske from* Sweden's Regional Recipes, *Penfield Books.*

is what made the Sami nomads—the reindeer roamed the tundra, grazing, and the Sami followed. Reindeer provided food, as well as hides for clothing and shelter. Today, the Sami are still reindeer wranglers and they have reindeer rodeos, but their cuisine now shows foreign influences: reindeer stroganoff and reindeer ragout join reindeer steak. Some Sami are settled in villages, and modern technology—mobile phones, helicopters, snowmobiles—helps them herd the reindeer. Their language has forty-nine words to describe reindeer in minute detail according to age, gender, head and body color, and what the horns look like.[63] They also have an extensive, specific vocabulary for salmon and for different kinds of snow and ice.

Ukraine: The Breadbasket of Russia

The large, flat plain of Ukraine is like the American midwest—grain-growing territory, the breadbasket of the country. The peasants there lived harsh lives. Long after the Renaissance, the Reformation, the Scientific Revolution, and many other social and intellectual movements had come and gone, peasants in eastern Europe were still living as they had in the Middle Ages. They were not slaves, but almost. They could not be bought and sold individually, but they were bought and sold with the land. When you bought a farm, you bought the land, the buildings, and the peasants. Laws made it impossible for the serfs to leave the land they worked. They revolted many times, unsuccessfully, until they were finally freed in 1861, the same year America began a Civil War to free its slaves. Until then, the lives of Russian serfs were reduced to the basics: work and try to get enough to eat. The scarcity of food was mirrored in the Russian Orthodox Church fast days—up to 200 a year.[64] The staple food was bread—black bread made from rye in the north; wheat bread in the south. It was eaten at every meal. It was sacred to these people and so was the place it was baked.

The Russian Stove

An old Russian peasant proverb says, "The stove in the home is like an altar in a church."[65] The stove and the fire in it were treated with the utmost respect. For Americans to understand the Russian stove, we have to get rid of all our ideas about what a stove is. In a place where the temperature during the winter routinely drops into double digits below zero, the stove could take up a quarter of the entire hut. It was always built into a corner, made of clay, and functioned as a combination stove, furnace, and fireplace. The stove cooked food, baked bread, and preserved fruits and vegetables by drying. It also kept the temperature just right for fermenting drinks like *beriozovitsa*, made from birch tree sap,

and *medovukha,* which was fermented honey like mead, but with hops added. Later, *kvas*—wheat fermented with water and sugar—became popular. The stove also warmed the house. Beds were built on top of it and around it, like a sleeping loft. In Russia, people who lounged around on the stove—what we call "couch potatoes"—were "stove potatoes."

Tea and Samovar

In the mid–eighteenth century, tea became all the rage in Russia, the only country that invented a separate machine to brew it (until the Mrs. Tea machine arrived to keep Mr. Coffee company in the twentieth century U.S.). The samovar was a large metal urn, usually brass, sometimes steel, copper, or silver, with a spigot to drain the hot water. The first technology to heat water for tea (or anything else) was a charcoal-filled tube in the center of the samovar, but today they are also electric. Samovars ran from the plain, water-boiling variety to very fancy ones that brewed tea on one side and coffee on the other, or had legs that unscrewed for portability. Some were a complete tea service, including cups and saucers, and creamer and sugar bowl.[66]

Peter the Great had visited England, prowled the shipyards in the Netherlands, and met European heads of state. But the ruler and the country he most admired were King Louis XIV and France. He sent a gift of caviar to impress Louis XV, and it did: he spit it out on the carpet.[67]

FRANCE

La Varenne and the Beginning of *Haute Cuisine*

One hundred years after Catherine de Medici's arrival in France, there was a dramatic shift in French cuisine. In the middle of the seventeenth century, in 1651, a French chef named La Varenne published a cookbook called *Le Cuisinier françois*—"The French Cook." As Anne Willan, who has named her cooking school in France after him, pointed out, *Le Cuisinier françois* "is a seminal work; it marks the end of medieval cooking and the beginning of *haute cuisine*."[68] Two years after *Le Cuisinier françois* appeared, La Varenne published *Le Patissier françois*—"The French Pastry Cook."

The beginnings of organization in French cuisine are here with two bouillons, one for meat, one for fish. It is also the beginning of modern sauces—the first roux, the fat and flour thickener. The trademark of most of La Varenne's recipes is subtlety. The hand that sprinkles the spices is light, not heavy like in the Middle Ages. Salt and pepper are the sea-

sonings, with a squeeze of lemon juice and maybe a bouquet garni. Missing are the large doses of cinnamon, mace, clove, ginger. The division of *Le Cuisinier françois* into meat days and meatless days still shows the influence of the Catholic Church. However, the use of truffles shows a break with the medieval theory of humors, because they have to be dug out of the ground, and in the Middle Ages, anything that grew close to the ground, let alone in it, was food for peasants.

More fresh fruits and vegetables appear in these recipes, because they are more readily available and because gardening had advanced considerably, especially among the upper classes. However, there were still not many foods from the New World. La Varenne used the foods that were trendy among the French nobility, like peas, lettuce, and artichokes. People *had* to have peas. Woe to the host who served asparagus instead, although asparagus could be served disguised as peas.

Le Patissier is the first thorough pastry cookbook, with precise, clear instructions and definitions of weights and measures, perhaps the influence of the Scientific Revolution that was then taking place in Europe. However, Willan thinks that *Le Patissier* was probably not written by La Varenne or was written by him and an anonymous Italian pastry chef, because Italian pastry chefs were the best in the world at that time. Also, cooking and pastry were two separate professions. In any case, it is sophisticated—there are fifteen varieties of marzipan. It also has the first cake-like biscuit recipes. La Varenne's books were the beginning of a trend. Forty years later, another chef, Massialot, wrote *Le Cuisinier royal et bourgeois*, which continued the style of cuisine La Varenne began.

Vatel: The Frenchman Who Gave His All

Another giant in food history is Vatel. From all accounts, he was a genius in many areas: planning and managing huge festivals, coming up with imaginative ideas for pageants, and menu planning. He impressed all who attended the gala events his employers hosted. Then, in 1671, disaster. As maître d'hôtel to the Duke de Condé, Vatel was responsible for planning and executing to perfection a major event for the king, who was coming to visit the duke for several days. The pressure was tremendous. The day a seafood feast and extravaganza was planned, almost no food arrived from the purveyors. Sure that he had destroyed the social and political life of the duke, as well as his own professional life, Vatel committed suicide by falling on his sword. As he was dying, the fishmongers arrived with full carts. But he had left no instructions on how to prepare and present all the food. Two hundred years later, in 1981, Vatel gave his name to a hotel management school in Paris. It now has seven branches internationally, and in 2000 a movie was made about

him starring Gerard Depardieu and Uma Thurman. Thirty-three culinary students from the Instituts Vatel, cutting, chopping, and slicing, made the kitchens and food prep scenes look real.

The Frenchman Who Loved His Coffee (Plant)

The seventeenth century marked the opening of the first coffeehouse in Paris in 1689 by an Italian named Procope. Almost everywhere coffee was introduced it met with two responses. The first was overwhelming enthusiasm from the people who drank it. The second was repression by the government. In Mecca, the governor ordered the coffeehouses closed when he heard the patrons were making fun of him. King George II did the same in England for the same reason. The French were going to ban coffee because they were afraid it would replace wine as the national beverage; the Germans feared for their beer. In all these places, people kept drinking coffee and eventually the bans were lifted. An exception was Italy, where coffee was never banned even though Catholic priests appealed to the pope to ban the Muslim beverage. Instead, the pope tried it and gave it his blessing.

From its beginnings in the ninth century, when it was ground into a paste with animal fat, ways of consuming coffee changed. Grinding coffee into a powder made it possible to read the grounds at the bottom of the cup, which gave a boost to fortune-tellers. In 1710, the French, ever neat and efficient, put the ground beans in a cloth bag, poured boiling water over it, and invented the infusion method. The French are also credited with adding milk and creating *café au lait*, which moved coffee from an upper-class evening beverage in a public place to a morning luxury indulged in private. Eventually, *café au lait* filtered down into the general population and became the drink of the working class.

Coffee changed more than just eating habits—it changed social and political habits as well. For the first time, people had a public place and a reason to congregate that did not involve alcohol. It began as a social pastime, and became a political one. The rulers who worried about what people in coffeehouses were saying about the government were right to be worried. In France, the ideas that spread through coffeehouse discussions played a real part in the French Revolution. Coffee is also connected with a food fable about the origin of the croissant.

One Frenchman played a huge role in spreading coffee throughout the world. In 1723, Gabriel Mathieu de Clieu thought coffee would grow well in the Caribbean. He had one plant and nurtured it like a sick baby all the way across the Atlantic Ocean, even giving it his water ration. He was right—the plant loved the Caribbean. A great percentage of the coffee grown in the world today can probably be traced back to that one plant.[69]

Food Fable

WHERE THE CROISSANT COMES FROM

The Fable: In 1683, the croissant was supposedly invented after the siege of Vienna. Either (a) a baker working late at night noticed the Turks trying to tunnel under the city and saved Vienna, or (b) to celebrate their victory over the Turks, the Viennese bakers invented a new pastry in the shape of a crescent—in French, *croissant*—which was either (a) the symbol on the Turkish flag, or (b) the shape of the trenches the Turks had dug and were forced to abandon. That would make the Austrians the first people anywhere to have a cup of coffee and a croissant. Not likely, since the croissant is one of the national foods of France and the earliest recipe is from 1905.[70]

The Fact: In 1683, the Turks attacked Vienna and lost. Pulling up stakes in a hurry, they left carpets, clothing, 500 huge sacks of strange little round beans. Dark. Hard. Bitter smelling. Maybe camel food? Torch them. But one soldier had been in the Middle East and woke up and smelled the coffee. The beans were saved—so many beans that he opened the first coffeehouse in Vienna with them.[71]

Louis XIV: The Sun King

Louis XIV was the most powerful ruler in French history (1643–1715). He was an absolute monarch who claimed his power came from God, which gave him a "divine right" to rule. He said, "I am the state," and was the final and only authority on everything in the French Empire. He grew up under the threat of assassination by the *Fronde*, nobles plotting against the king. Louis was suspicious for the rest of his life and took safety precautions, including where he lived and how he ate. He built an enormous palace eleven miles southwest of Paris, in Versailles (vur SIGH), and made the nobles live there so his spies could keep an eye on them.

Dinner at Versailles

The palace at Versailles was like a small city. Originally a hunting lodge, Louis XIV expanded the main building to 2,000 rooms, about 500 yards long, with two 150-yard-long wings. In the center of the U-shaped courtyard, Louis XIV placed a huge statue of . . . Louis XIV. The 15,000 acres of gardens, lawns, and woods included 1,400 fountains. One of the centerpieces was the *Gallerie des Glaces*—the "Hall of Mirrors"—a long formal room. A wall of mirrors reflected the gardens outside glass-paned doors (what we call French doors). Ten thousand people lived in Ver-



Versailles. *Photo courtesy John Bandman, Certified Chef de Cuisine and Educator, New York Restaurant School at The Art Institute of New York City.*

sailles; 2,000 worked in the kitchens. Running the palace cost more than half the annual income of France.[72]

Dinner at Versailles was at 10:00 p.m., about the time it gets dark in Paris in the summer. The Sun King took advantage of mealtimes to enforce his power. To guard against poisoning, his food was taken in locked containers from the kitchen to the dining hall, escorted by his private armed guards, the Musketeers. They announced the passage of the king's food through the halls of the palace by calling out, *"Les viandes du roi!"*—"The king's food!"—and everyone had to stop what they were doing and bow. Since he was without equal, Louis dined alone (except sometimes with the queen) in kingly splendor at a huge banquet table high on a platform. Musicians played while he dined; courtiers stood and watched while he ate, hoping for a word of acknowledgment or favor.

The meals Louis XIV ate were legendary. A glutton, he consumed huge amounts of food in no particular order, often against the advice of his physicians. Once, he ate "four full plates of soup, a whole pheasant, a partridge, a big dish of salad, two big slices of ham, some mutton with *jus* and garlic, a plate of pastry, and then fruit and some hard-boiled eggs."[73] And he ate it all with his hands. Although Catherine de Medici had brought the fork from Italy more than a century earlier and it was accepted throughout Europe, Louis didn't like it and refused to use it. He did use something else that Catherine had introduced, the handkerchief.

The *Orangerie*

Sweet oranges became very popular at this time. The first oranges, the ones that the Muslims planted wherever they conquered, were bitter oranges that were called blood oranges because of their color or Seville oranges, after the city in Spain. The sweet orange tree—*Citrus sinensis* or Chinese orange—traveled through India to the Middle East. It arrived in Lisbon in 1625 and spread quickly all over Europe, replacing bitter oranges in most places.[74] Orange juice and peel were thought to be the antidote to poisons, colic, and tapeworm. Wealthy people gave theme dinners planned around citrus fruit.

MENU:

The Sixteen-Course Citrus Dinner

"In 1529, the Archbishop of Milan gave a sixteen-course dinner that included:

caviar and oranges fried with sugar and cinnamon
brill and sardines with slices of orange and lemon
one thousand oysters with pepper and oranges
lobster salad with citrons
sturgeon in aspic covered with orange juice
fried sparrows with oranges
individual salads containing citrons into which the coat of arms of the diner had been carved
orange fritters
a soufflé full of raisins and pine nuts and covered with sugar and orange juice
five hundred fried oysters with lemon slices
candied peels of citrons and oranges"[75]

Louis XIV, an orange aficionado, built an *orangerie* at Versailles in the shape of a 1,200-foot crescent and used it as a backdrop for the masked balls and entertainments he liked so much, especially dancing and the comedies and satirical plays of Molière. It was the job of the royal gardeners to keep the Sun King supplied with oranges and orange blossoms all year-round. The trees were usually kept in wheeled pots so they could be moved in from the cold or just repositioned to take advantage of the sun, like invalids. When fresh oranges weren't available, painters and weavers provided images of oranges throughout the château in paintings and tapestries.[76]

By the time he died in 1715, Louis XIV had turned France into a superpower, a leader in world politics, fashion, and cuisine. But the palaces and the wars were expensive, and Louis left France with a debt equivalent to about twenty billion dollars. Since the nobles paid no taxes, the money would have to be squeezed out of the peasants. Three-quarters of a century later, the peasants would grow tired of paying half their income in taxes so the nobility could feast on luxuries while they starved. They would make the Sun King's descendant, Louis XVI, pay the ultimate tax: his head.



Seventh Course

Election Cake and "Let Them Eat Cake": THE AMERICAN AND FRENCH REVOLUTIONS—THE EIGHTEENTH CENTURY AND THE ENLIGHTENMENT

THE ENLIGHTENMENT

The eighteenth century was the Enlightenment, also called the Age of Reason. It was rational and scientific as opposed to the superstitious and ignorant "Dark Ages," as people thought of the Middle Ages then. The Enlightenment was a time of belief in the human mind, and capitalized on the discoveries that had been made in the Scientific Revolution in the seventeenth century.

"Wicked Dishes"—*Nouvelle Cuisine*

Enlightenment culture caused a drastic change in cuisine—what was eaten and how. They called it *nouvelle cuisine.*[1] As Piero Camporesi points out in *Exotic Brew,* the Enlightenment finished the break from medieval foodways that the Renaissance began. Beef consumption plummeted as heavy meats disappeared from refined tables. Even that last holdover

from the Middle Ages, the peacock, was finally retired from the table, replaced by *gibier*—sexy small game like "turtledoves, quails, thrushes, and robins."[2] Aphrodisiacs were the food of the day, most of all raw oysters—"especially when dropped down the front of a dress and then retrieved"[3]—and truffles, not as garnish, but in "a heaping mound . . . tossed simply with a bit of butter or oil."[4] Lamb testicles and stag penis provided stimulation. Foods that would cause bad breath or gastrointestinal rumblings and interfere with flirting and sex disappeared from fine dining: garlic, onions, cabbage, cheese. The ritual of public handwashing before the meal was discarded, along with the prayer: only people who were dirty needed to wash, and God's presence was not requested at these dinners. The courses were small and delicate, napped in sauce. Chafing dishes placed on "silver boxes filled with hot water which kept the food always hot" meant the servants could be dismissed from the room.[5] Temptation was everywhere: "You are almost always presented with wicked dishes, that is to say with just those dishes that make you eat even when you have no appetite at all."[6] Just in case the exquisite wine made you sleepy, coffee at the end of the meal perked you up—the night was still young.

Large communal banquets in the main hall gave way to intimate, seductive dinners in rooms used only for dining, where mirrored walls reflected firelight from crystal chandeliers. Coarse whole-grain bread trenchers were swapped for delicate china in bright colors and patterns that didn't soak up the new sauce-based cuisine. Chairs, banquettes, and draperies were in silk and satin brocade. So was clothing. No more coarse, loose-fitting fabrics like in the Middle Ages, or heavy velvets that hid the figure in the Renaissance. Enlightenment clothes were tight fitting, made of slinky fabrics cut to show every curve and bulge: "their clothes . . . clinging to their limbs so that they do not appear covered . . . their legs visible . . . their dainty feet in sparkling golden buckles and fine gems like those that . . . used to ornament our hands."[7] And those were the men. Women's dresses were low cut. Both sexes wore enormous wigs. Women's eyes and lips, exaggerated with makeup, peeked out from behind flirtatious hand fans. Witty conversation was added to what was expected at dinner, along with music—something from Mozart, perhaps.

The food and the fashions were French, spread throughout Europe by French chefs, clothing designers, and hairdressers. During the Enlightenment, French culture dominated; it displaced Italian and Spanish. Under the reigns of Louis XV and XVI, class differences grew. These foods and fashions were for bored nobles with too much time on their hands, like the legendary Italian lover Casanova (1725–1798). They wanted a jolt from new foods and little living toys, so breeders invented lap dogs for them. New foods could be imported, or old foods pretending to be something else: sky blue sauce (cream sauce with herbs), veal in the form of donkey droppings (veal birds), asparagus disguised as peas.[8] This

new style, these foods with "lying and peculiar names,"[9] were regarded by some as effeminate and immoral, as was staying up all night in pursuit of earthly delights and sleeping all day instead of going to church. These elaborate Enlightenment fashions were called "elegant simplicity," the way that in the twenty-first century, reducing flavors to essences, powders, and foams is called "minimalist." They both require maximum effort from the cook.

Benjamin Franklin and Temperance

America's Benjamin Franklin was a product of the Enlightenment. Born in Boston, he settled as a teenager in Philadelphia where he eventually became a publisher, established circulating libraries, and was one of the founders of the University of Pennsylvania. He also experimented with electricity, taught himself French, Italian, and Spanish, became ambassador to France, and was a strong presence at the conventions that wrote the Declaration of Independence and the Constitution.

Franklin's autobiography contained Enlightenment ideals: his version of the Ten Commandments, which he called the Twelve Virtues (he was forced to add a thirteenth, humility). The first virtue was "Temperance: Eat not to dullness; drink not to elevation." He put moderation in food and drink first, he said, because the other virtues would be more easily achieved if you weren't under "the force of perpetual temptations."[10] He also suggested that the way to begin the day was to ask yourself the question "What good shall I do this day?" and end it by asking "What good have I done today?" Franklin didn't always manage to practice what he preached.

AMERICA: FROM COLONY TO COUNTRY

Migrations: The Pennsylvania "Dutch"

England's colonies in North America continued to grow in the eighteenth century, partly because England advertised. The mercantile system depended on a large population. The more people in a colony, the more raw materials they could send to the home country and the more manufactured goods they could buy from it. William Penn distributed flyers about how wonderful life was in his new colony of Quakers, people who didn't believe in war or slavery, in Pennsylvania—"Penn's woods." Some of the flyers reached Rhinelanders—Protestant German and Swiss farmers in the Rhine River Valley. A winter of unprecedented brutal cold got them thinking about moving to Pennsylvania. New laws that made it easier for foreigners to become British citizens, and therefore to own land

in the colonies, got them on ships headed for Pennsylvania. To the ears of the English settlers already there, *Deutsch*, the German word for "German," sounded like "Dutch," and the Rhinelanders have mistakenly been the Pennsylvania Dutch ever since.

A classic Pennsylvania Dutch dish is *schnitz und knepp*, ham stew with dried apples (*schnitz*) and dumplings (*knepp*). Potatoes also figured prominently in their diet. Mashed potatoes and potato water were in raised breads, cakes, and cinnamon buns—*schnecke*. They made potato fondant candy. On Shrove Tuesday, the day before the beginning of Lent, they made *fastnacht*—doughnuts—with mashed potatoes and potato water. These were solid balls of deep-fried dough; the hole, which allowed the dough to cook faster, was invented later. By 1870, catalogs were selling doughnut cutters with holes.[11]

The Pennsylvania Dutch housewife took pride in her skills at jam making and pickling, her "seven sweets and seven sours." The sweets were fruit butters, conserves, and jams. The sours were pickled vegetables and relishes called chow chow, sweetened with sugar, soured with vinegar, usually seasoned with mustard seed, dry mustard, and celery seed, and colored with turmeric, like chutney. A favorite pickled food still served in bars in Pennsylvania Dutch country are these garnet-colored eggs which go well with beer, along with pretzels.

INGREDIENTS:

Pennsylvania Dutch Eggs Pickled in Beet Juice[12]

1 cup beet juice
1 cup vinegar
¾ teaspoon salt
½ teaspoon cloves
¼ teaspoon allspice
¼ teaspoon mace
1 or 2 small, cooked beets
Shelled, hard-boiled eggs

The Pennsylvania Dutch ate pie at all three meals. They filled their pies and tarts with apples, sour cherries, gooseberries, huckleberries, raspberries, blackberries, grapes, raisins, walnuts, or rhubarb. When they had nothing else to put in a pie, they made Vinegar Pie—water spiced with vinegar and nutmeg, sweetened with sugar, thickened with egg and flour; or cake-like Shoofly Pie—water, molasses, and baking soda with a crumb topping, so sweet you had to shoo the flies away. When the men got together to do serious physical work like building a barn, they also did se-

rious eating. They stacked half a dozen different kinds of pies on top of each other, cut through them all, and chowed down on "stack pie."[13]

The descendants of most of the Rhinelanders moved into mainstream America. But the Amish continue to live a pre-industrial life. They do not have electricity. They drive a horse and buggy, not a car. And they still cook good, solid, abundant food. As Swiss and German food historian Nika Hazelton pointed out, "If you want to see what eighteenth-century rural life in Switzerland was like, you'll do far better in a strict Pennsylvania or Indiana Amish settlement than in present-day Switzerland or Germany."[14]

Hannah Glasse: *The Art of Cookery*

The first cookbook printed in America was written in England. In 1747, a thirty-nine-year-old illegitimate English woman whose half-brother was a knight published *The Art of Cookery Made Plain and Easy*. It was *the* cookbook of the eighteenth century, on both sides of the Atlantic. Glasse begins by telling the reader:

> [M]y Intention is to instruct the lower Sort, and therefore must treat them in their own Way. For Example; when I bid them lard a Fowl, if I should bid them lard with large Lardoons, they would not know what I meant: But when I say they must lard with little Pieces of Bacon, they know what I mean. So in many other Things in Cookery, the great Cooks have such a high Way of expressing themselves that the poor Girls are a Loss to know what they mean . . .[15]

Glasse takes a common sense approach to cooking: why use expensive ingredients when you can get results that are just as good for half the price? Just because something is French doesn't make it better. And be on the lookout for adulterated food. She begins with instructions about how to tell if meat is fresh: for veal, "The loin first taints under the kidney"[16]; in beef, yellowish suet "is not so good."[17] For butter, she tells cooks not to just take what they are given, but to look in the middle. In cheese, they should beware of worms, mites, and maggots.[18] Glasse believes in cooking what is in season, and religious holidays control the calendar: "The buck venison . . . is in high season until All hallows-day [November 1]: the doe is in season from Michaelmas [September 29] to the end of December."[19] Glasse covers everything from basics—literally, how to boil water—to how to brew elder[berry] wine, turnip wine, white mead, maple beer, and "cyder." Many of her recipes are very modern: "The best way to roast a turkey is to loosen the skin on the breast of the turkey, and fill it with force-meat."[20] She recommends oyster and celery sauce seasoned with mace and lemon, and thickened, as many of her sauces are, with a roux: "some butter rolled in flour."[21] She also includes many of those British favorites: puddings—rice, bread and but-



Cooking in colonial America. *Courtesy Colonial Williamsburg Foundation*



Hogs butchered and curing in the American South. *Courtesy Colonial Williamsburg Foundation*

ter, prune, chestnut, apricot, Seville orange, lemon, almond—still spiced with Middle Eastern ginger, nutmeg, rose water, and orange flower water; custards; cakes; and pies, sweet and savory. There are also recipes for candy, but Glasse later devoted an entire book to it, *The Complete*

Confectioner, published around 1770. Some modern food writers have attributed the expression "First Catch Your Hare" to Hannah Glasse, and commented on how humorous it is. But Hannah Glasse never said that. What she said was, "Take your hare when it is cased."[22]

The Earl of Sandwich

In 1762, an English earl's name was used for the first time in print to describe a new food. John Montagu, the Fourth Earl of Sandwich, liked to gamble but hated to get up from the table to go eat. The solution: he had cold meat between two slices of bread brought to him. The sandwich caught on around the world.

The French and Indian War, 1754–1763

The American colonists' desire to move west began the first global war that started in North America, and led to the American Revolution. (See Appendix C for a list of major wars and battles.) The war that became known as the French and Indian War in America and the Seven Years' War in the rest of the world began in 1754 when the governor of Virginia sent a twenty-one-year-old surveyor named George Washington west of the Appalachian Mountains to stake out Virginia's claim to farm land in the fertile Ohio River Valley. The French, who had fur trading posts there, objected. Washington fired the first shot. When the war ended in 1763, France had lost everything in North America except Haiti. The result of the war: the British forbade settlement west of the Appalachians, which made the Americans very angry, because they had just fought for nine years to be able to go west of the Appalachians. They went anyway. And France wanted revenge.

Taxes and Taverns

The struggle between American colonists and British Parliament for control of the colonies began in earnest the year after the French and Indian war ended. In 1764, in an effort to raise money to pay for the war, Parliament—where no Americans were represented—taxed sugar. The colonists protested. Parliament lowered that tax, then the next year passed the Stamp Act, which taxed paper, from deeds and wills to newspapers and playing cards. The furious colonists cried, "No taxation without representation"—you can't make us pay taxes we didn't vote for—and boycotted British wool. Americans stopped eating mutton to let sheep live and provide Americans with wool. The Sons of Liberty, men recruited from taverns by Samuel Adams, a local brewer (yes, that Sam Adams), tarred and feathered the stamp collectors and broke into their houses. The violence forced Parliament to repeal the Stamp Act in 1766, before it went into effect. There were celebrations in taverns throughout the colonies.

Crossing Cultures

SANDWICH

Sweden's modern *smörgäsbord*—a full-meal elaborate "sandwich table" buffet—began life in the eighteenth century as the *brännvinsbord* or "aquavit buffet"—appetizers, with the food incidental to multiple flavors of aquavit—literally "water of life," but really hard alcohol made from potatoes.[23] In Denmark, it is *smørrebrød*, literally, "bread and butter"; in Norway, *smørbrød*. These are traditional Christmas Eve dinners. The sandwiches are open-faced, a piece of bread topped with pickled or smoked herring, sardines, salmon, anchovies, cheeses, salami, beef, liver paste, sliced radishes, watercress, chives, onions, pickled beets, cucumbers, dill potatoes. The Swedes add crisp flatbreads and meatballs. A more elaborate sandwich is Danish *rullepølse*—raw meats pounded flat, layered, rolled up, sewn together, simmered for hours in water, then pressed flat and sliced.

In the late nineteenth century U.S., the frankfurter, aka hot dog, and the hamburger, named after the German cities where they originated, became popular; the health food movement produced the PB&J—peanut butter and jelly sandwich. Current American sandwich standards include the BLT—bacon, lettuce, and tomato—and its triple-decker version, the club, with a layer of chicken or turkey. In the 1930s, the comic strip and movie character Dagwood made the sandwich that bears his name by going vertical with anything in the refrigerator.

There are regional differences and immigrant contributions. New England produced the lobster roll in two forms: a lobster salad sandwich, and for purists, just picked lobster chunks in butter on an eggy hot dog bun. New York and Nebraska both claim the mid–twentieth century reuben—hot corned beef and Swiss cheese with Thousand Island dressing. New Orleans weighed in with the po' (poor) boy, a fried oyster sandwich; and the muffuletta, Italian cold cuts like mortadella, and ham and Swiss with olive salad. Italians in Philadelphia created the famous Philly cheese steak, a hot sandwich with grilled onions. Other names for sandwich are sub (shaped like a submarine), torpedo, grinder, hoagie, and hero. Sandwich chains include Blimpy's and Subway. And of course, there are the burger places: McDonald's in 1955, Burger King, Jack in the Box, Wendy's, and White Castle, which makes their burger square.

In the late twentieth century, immigrants from Iran and other western Asian countries brought pocket sandwiches to the U.S.—grilled seasoned meat called *shawarma* in pita bread with sauces made of tahini or yogurt or both. Palestinians and Israelis stuff the pita with *falafel*, fried balls of chickpea batter. Italy's grilled sandwiches, sometimes containing herbs like basil, are panini—"little bread." France's signature sandwich is the croque monsieur—grilled ham and cheese.

Asian fusion sandwiches called *banh mi* are small French baguettes with Asian fillings like Korean barbecue, Chinese roast pork, Vietnamese lemongrass-marinated beef, and Thai barbecued chicken. Condiments include chiles, fresh herbs, pickled ginger, and lime juice. And although McDonald's is popular in China, cold sandwiches aren't—they're offerings to the dead.



England and France in North America, 1755, with disputed land claimed by George Washington for Virginia. *Courtesy Corbis Digital Stock*

Tensions escalated in Boston, a town with fewer than 16,000 people, when the British stationed 4,000 red-coated soldiers—the Bostonians called them "lobsterbacks"—there in 1768 and expected the people to take them into their homes and feed them for nothing. Two years later, after a crowd threw sticks, rocks, and snowballs at them, the soldiers opened fire. They killed four Americans, including a black man, Crispus Attucks. Sam Adams began the Committees of Correspondence, a propaganda letter-writing campaign, to report the Boston Massacre and whip all the colonies up against England. Now he would use the internet, but in colonial America snail mail traveled on the Boston Post Road (highway U.S. 1 on the east coast) through New Haven to New York. Along the way, mail was not delivered to individual houses, but to taverns, where reports of British atrocities inflamed Americans' anger, and strips ripped off dried salted codfish hanging on the wall inflamed their thirst.[24] The Green Dragon Tavern in Boston's North End (now Boston's Little Italy) was where Adams, silversmith Paul Revere (whose name and picture are still on the bottom of the line of cookware named after him), and others got together to plan.

British Prime Minister "Champagne" Charlie Townshend had a new approach: instead of one large tax, many small taxes. The Townshend Acts

taxed glass, paint, lead, and tea. The colonists protested. Eventually all the taxes were repealed—except the tea tax. The British East India Company needed the money, so they set the price of the tea *with the tax* lower than what it cost to buy it from American smugglers.[25] The Americans were furious—did the British really think they could sucker them into paying a tax they had no part in passing? The tea had to go.

"Boston harbor a teapot tonight!"

On December 16, 1773, about 150 men in disguise, some dressed like Indians, others with their faces blackened with charcoal, boarded the East India Company ships in Boston Harbor. Hundreds of chests of tea, each weighing 350 pounds, were smashed open with the "Indians' " tomahawks and thrown into the harbor. In three hours, it was all over. The masterminds of the tea party, John Hancock and Sam Adams, made sure they were seen sitting in a tavern far away. Boston wasn't the only place that protested. In Annapolis, Maryland, colonists burned ships. Other colonies staged public tea burnings.

Parliament retaliated: they shut down the port of Boston until the colonists paid for the tea. Then they came to get the colonists' ammunition and the ringleaders—John Hancock and Sam Adams. But Paul Revere made his famous ride, alerting everyone that "The British are coming! The British are coming!" On April 19, 1775, the American Revolution began. The shot that began the revolution was "the shot heard 'round the world," because it would inspire people in many other countries to fight for their freedom, too.

America "will always have a market while eating is the custom of Europe" —Thomas Paine[26]

But Americans still considered themselves Englishmen. They weren't talking about independence until Thomas Paine published a pamphlet called *Common Sense*, in which he outlined the reasons it would be to America's benefit to break away from England: America didn't have enemies but England did and forced Americans to fight in its wars; monarchy causes wars and rebellions; and England was standing in the way of America's economy. Paine reassured his readers that America's food was a necessity to Europe: "Our corn will fetch its price in any market in Europe."[27] He laid his arguments out forcefully: " 'TIS TIME TO PART" (uppercase in original).[28] Americans listened. On July 4, 1776, the Declaration of Independence, the document announcing America's freedom from England and using the words "The United States of America" for the first time, was celebrated with fireworks and cheering.

Legend has it that 1776 was also the birth of the cocktail.

Food Fable

WHERE THE COCKTAIL COMES FROM

"A barmaid, Betsy Flanagan, at Halls Corners in Elmsford, New York used a cock's feathers to decorate behind the bar. When one of the imbibers asked for a glass of those 'cocktails,' Betsy served him a mixed drink with a feather stuck in it."[29]

"No meat, no soldier"

Under the eighteenth-century rules of war, fighting was suspended during the winter. In the winter of 1777–1778, British officers were eating and drinking and dancing in New York. British fighting soldiers got rancid, wormy food—rock-hard biscuits that had been captured fifteen years earlier in the French and Indian War. They slammed cannonballs down on them to soften them.[30]

Both groups were better off than the 12,000 Americans starving and freezing with General George Washington at Valley Forge, Pennsylvania. They had only animal skulls and hooves that they boiled into thin stews. They had no bread at all for days. Their shoes were worn out or gone; their blankets were threadbare. Some of the men were nearly naked. Limbs froze or became gangrenous and had to be amputated. The near-starvation rations weakened the men's immune systems. More than 2,000 died of typhoid, typhus, smallpox, and pneumonia. Finally, the cry went up from the ranks: "No meat, no soldier." Washington wrote to the Continental Congress and made it clear that if his men did not receive food and supplies, the war would be over.[31] He finally got them.

It is ironic, because before Washington left his estate at Mt. Vernon in Virginia to command the army, he left instructions about running the plantation: "Let the hospitality of the house with respect to the poor be kept up. Let no one go hungry away."[32]

We Couldn't Have Done It Without the French

For almost the first two-and-one-half years of the American Revolution, the French provided the Americans, who had few factories, with ammunition, training, and officers like Lafayette. They did it secretly to avoid another war with the British. However, after the Americans beat the British at the Battle of Saratoga in upstate New York in 1778, the French went public with their support. This forced the other major countries of the

world to take sides—the war went global. One of the reasons King Louis XVI aided America was to keep England from winning and then coming after France's Caribbean sugar property in Haiti. And to get revenge.

England's other great enemy, Spain, contributed money to the Americans, but it was a French squeeze play that ended the war. Washington's army had the British army, under General Cornwallis, backed up against the sea at Yorktown, Virginia. Cornwallis wasn't worried—the British fleet would sail down from New York to pluck him and his troops to safety. Except that the French fleet sailed up from Haiti and sandwiched the British in. Game over. General George Washington said farewell to his men at Fraunces Tavern in New York City after the six years of war that changed America from a British colony into the United States.

The Whiskey Rebellion and the Bureau of Alcohol, Tobacco, and Firearms (BATF)

In 1787, the year that British sailors on the HMS *Bounty* mutinied against Captain Bligh as he tried to transport breadfruit from Tahiti to the Caribbean, fifty-five white, middle-class men, mostly businessmen and lawyers, gathered in Philadelphia, Pennsylvania, to draw up a document that would change the world—the United States Constitution. It went into effect on April 30, 1789, when George Washington was sworn in as the first president in the nation's capital, then New York City. He needed a cook, so he put an ad in newspapers: "No one need apply who is not perfect in the business, and can bring indubitable testimonials of sobriety, honesty and attention to the duties of the station." George and Martha Washington never did get what they needed—their cooks were too extravagant, or they could cook but not bake, which meant that desserts and cakes had to be purchased from commercial bakeries, which cost extra. When the capital moved to Philadelphia, founded by anti-slavery Quakers, one of Washington's slave cooks ran away.[33]

Washington had only three cabinet members: Secretary of State Thomas Jefferson, Secretary of War Henry Knox, and Secretary of the Treasury Alexander Hamilton. One of the first things Hamilton did to stabilize the economy of the new country and ensure that it had good credit with the rest of the world was to raise money by taxing luxury items like imported alcoholic beverages, especially wines and distilled liquors. Americans in the 1790s drank about six gallons of alcohol per person each year, twice as much as now. Most was beer; about one-third was distilled liquor.[34] Since efforts to grow vines and make wine had failed in North America in spite of offers of large cash prizes, wine was imported and expensive, so wealthy people would be taxed. Jefferson objected to Hamilton's tax on imported wines for two reasons. First, it was undemocratic because it didn't tax just the rich; it also kept wine out of reach of the middle classes. Second, he believed that in countries where good wine

was available, there was less drunkenness. Where wine was not available, people turned to hard liquor—"ardent spirits"—and got drunk.

Nevertheless, Hamilton's tax on imported spirits proved such a good source of income that Congress extended it to distilled spirits produced within the United States. This caused problems in 1794.

The farmers in western Pennsylvania who grew corn and rye didn't think the "white lightning" alcohol they made out of it was a luxury. It was a necessity, accepted as payment for goods and services. Transporting bulk grain over bad or non-existent roads was not profitable. Transporting the grain in its concentrated liquid, alcoholic form, was. They followed their refusal to pay the whiskey tax with boycotts and demonstrations. President Washington knew better than anyone where that could lead. He called up 13,000 militia men to put down the rebellion by a few people. The officers were well fed with "mountains of beef and oceans of whiskey."[35] The organization within the Treasury Department that grew out of the response to this rebellion became the Bureau of Alcohol, Tobacco, and Firearms—the BATF—which still oversees alcohol production in the United States today. Jefferson thought that Washington had engaged in overkill. The differences that came to a head over the Whiskey Rebellion were one of the causes of political parties in the United States.

A New People and a New Cuisine—The First American Cookbook

In 1796, a cookbook called *American Cookery* was published in Hartford, the capital of Connecticut. The author was a woman named Amelia Simmons, who described herself as "an American orphan." The book revealed much about Simmons and about the values of the new country. Continuing the country's tradition of self-betterment, Simmons stated in the first sentence that the book was written "for the improvement of the rising generation of *Females* in America" (italics in original). She hoped that the information in her book would make them "useful members of society." She talked about her own situation—"the orphan must depend solely upon *character*"[36] to make her way in the world (emphasis in original).

On the title page of *American Cookery*, Simmons declared that the recipes were "adapted to this country." Food historian Karen Hess explains the importance of the cookbook: Simmons wrote about the ingredients she knew, many of them New World foods that had been ignored in British cookbooks and appeared in print in Simmons's book for the first time. For example, she published the first recipes for pumpkin and for corn. She used the word *cookie*, the diminutive of the Dutch word for cake. *Sla* was another borrowing from the Dutch, for salad. Cabbage salad became that American favorite *coleslaw*. Simmons also included one very important American first, a leavening shortcut called

pearlash, the forerunner of baking powder, which came into use in 1856. The new leavening gave rise to the first baked fast food—quick breads. Before chemical leavening agents, making baked goods rise was time-consuming and expensive. The cook had to either proof yeast and keep it at the right temperature through multiple risings, beat eggs to incorporate air into them, or make pastry with layers of butter that would puff when baked. But baking powder or soda combined with flour and salt produced what Americans called biscuits. American biscuits are not a true biscuit, which is French for "twice cooked" (in Italian, *biscotti*), because American biscuits are cooked only once. But they rise twice now, because of double acting baking powder. This new American way to bake faster and easier caught on immediately in Europe. Simmons's cookbook was so popular that a second, expanded version was published. It included a recipe for Election Cake.

Holiday History

ELECTION DAY

The biggest holiday in colonial New England, proud of its democracy, was Election Day, in May; it continued to be a holiday in the New Republic. Thanksgiving and Christmas were not celebrated until the Civil War, but Election Day was a day off from work for everybody. Even blacks joined the parades, singing and dancing to banjo and drum music. In New En-gland, slaves got to vote for leaders in their slave communities: "The Negro 'government' had its 'judges,' 'sheriffs,' and 'magistrates,' and its courts probably tried trivial cases between Negroes as well as petty cases brought by masters against their slaves."[37] Since the tavern was the polling place, it was also an excuse to have an extra drink or let someone buy you one to persuade you to vote for his candidate. But it was almost not necessary to drink to get drunk—there was plenty of liquor in the Election Cake. At the end of the nineteenth century, reformers campaigned to stop holding elections in taverns and getting voters "liquored up" because it undermined democracy and led to violence and riots. By then, the temperance movement had taken firm hold of cooking, too—there was no liquor in the election cake.

1789 saw the birth of the constitutional government that exists to this day in the United States, and the death of the Bourbon dynasty that had ruled France for hundreds of years. Ideas connected with America's fight for liberty, and the money that helped them succeed—taxes paid by the French people—would topple the monarch who had come to America's aid, King Louis XVI of France. This would have profound repercussions for global politics and cuisine.

INGREDIENTS:

Election Cake Comparison

1796—Amelia Simmons[38]	**1918**—Fannie Farmer[39]
30 quarts of flour	1¼ cups flour
1 quart yeast	1 cup bread dough
10 pounds of butter	½ cup butter
14 pounds of sugar	1 cup brown sugar
12 pounds of raisins	⅔ cup raisins, seeded and cut in pieces
—	8 finely chopped figs
3 dozen eggs	1 egg
1 pint of wine	—
1 quart of brandy	—
4 ounces cinnamon	1 teaspoon cinnamon
4 ounces fine colander [coriander?] seed	—
3 ounces ground allspice	—
—	¼ teaspoon mace
—	¼ teaspoon nutmeg
—	¼ teaspoon clove
—	½ cup sour milk
—	½ teaspoon soda
—	1 teaspoon salt
(The finished cake weighed ninety pounds)	

THE FRENCH REVOLUTION: "LET THEM EAT CAKE"

Just as the Seven Years' War was one of the causes of the American Revolution, so the American Revolution was one of the causes of the French Revolution. The French people were inspired by seeing that an underclass could overthrow a monarchy, and they were angry because they had been taxed to the maximum to pay for people of another country to win freedoms they did not have. France was still a feudal society, little different from the Middle Ages. The people were divided into three groups, or estates. The first estate was the clergy, which paid about two percent of the taxes in France. The second estate was wealthy nobles

who paid no taxes. The third estate paid ninety-eight percent of the taxes and was ninety-eight percent of the population: peasant farmers, urban poor, and the bourgeoisie—the merchant class, an educated, middle class that took business risks and brought money into France. The third estate paid fifty percent of their income in taxes but couldn't vote, so they couldn't change the tax laws or anything else—like the Americans' cry of "no taxation without representation."

Haute Cuisine and Fine China

Haute cuisine—high cuisine—came out of the large kitchens of France's wealthy nobles. The cooks might be men or women, but the men's salaries were more than triple the women's, and the men were always the managers.[40] Cooking did not include bread, which was bought at the bakery (*boulangerie*), or pastry, which was bought at the *pâtisserie*. In a modest household, the cooking might be done by the woman of the house and a maid. In larger establishments, there would be specialized staffs. In charge of everything was the maître d'hôtel, who planned all the meals, hired and fired, managed the accounts, and kept the keys, because the food, wines, linens, and tableware were locked up. In both kinds of households, the day began by putting the stockpot on the fire—*pot au feu*—and throwing yesterday's leftovers and today's new meat into it.

Much of the silver and gold tableware of seventeenth-century France had been melted down to finance Louis XIV's wars and palaces, but it was being produced again. In eighteenth-century France and throughout Europe, tableware was fine china. For centuries, Europeans had been searching for a way to duplicate the delicate, beautiful—and extremely expensive—porcelain plates that came from China. Like the silkworm,

CHRONOLOGY—EUROPEAN PORCELAIN (CHINA)[41]

1640–1740	Delft, Netherlands, makes glazed earthenware—"poor man's porcelain"
1710	Porcelain patented; Royal Saxon factory at Meissen, Germany. Super-secret; all workers are deaf mutes
1713	Porcelain commercially sold at Liepzig, Germany
1719	Porcelain factory in Vienna, Austria
1738	Porcelain factory in Vincennes (later Sèvres), France
1743	Porcelain factory in Naples, Italy
1744	Porcelain factory in Chelsea, England
1756	Porcelain factory moves to Sèvres from Vincennes, France
by 1760	Royal Danish factory at Copenhagen, Denmark
ca. 1794	Josiah Spode II perfects bone china in England

this was a closely guarded Chinese state secret. Finally, Europeans found ways to duplicate the Chinese plates closely enough. However, the lower classes in France had neither plates nor food to put on them.

"This nation [France] does not have a normal relation to food."[42]

It is impossible to separate food from the French Revolution. More than any other revolution in history, food played a crucial part in the French Revolution, literally and symbolically. At the heart of the issue were two foods essential to the French people, bread and salt. And at the heart of the bread issue were the bakers.

The French have been described as a nation of "panivores"—bread eaters—and regard their bread as the best in the world. Bread had both literal and symbolic meaning in French cuisine and culture. It was a source of nutrition, providing most of the daily calories, but it also represented health and well-being, the French identity, and the French religion, Catholicism. French bread was supposed to be wheat and white. In 1775, people rioted because they got dark bread.[43] Scientists and chemists claimed that the bakers baked bad bread because they knew nothing about science, so in 1782, a school was established to study bread from milling through distribution, and spread the word to bakers throughout France. Scientist Antoine-Augustin Parmentier was one of the people in charge of the school.

The Bakers and the Bread Police

There was tension between the people and the bakers for almost a century before the French Revolution. Bread was regarded as a public service necessary to keep the people from rioting. Bakers, therefore, were public servants, so the police controlled all aspects of bread production, including making sure that it continued. Bakers had to get permission from the police if they wanted to go into a different profession.[44] Sometimes the police helped the bakers. For example, when merchants hoarded yeast to create an artificial shortage and jack up the price, the bakers' guild had the police search the merchants' homes and shops and confiscate the yeast.[45]

The master bakers exercised very tight control over the journeymen through a certification system. After 1781, every journeyman baker had to register with the guild and get a *livret*—French for "booklet"—which was like their green card or passport. The journeyman had to show the *livret* to rent a room or to get food in a tavern. When he went to work, he gave the *livret* to the master. When he changed jobs, the journeyman had to inform the guild within twenty-four hours and pay a fee. He also had to show in the *livret* that the master had given permission. Some masters forced journeymen to work for them by keeping the *livret.* If he left without it, the journeyman was like an illegal alien in his own country. Police raided

shops where journeymen were working illegally, the way the Immigration and Naturalization Service—the INS (*La Migra*)—raids shops now. The illegal journeymen could be sent to jail or back to their former masters.[46]

The bakers, like the grain and flour merchants, were presumed to be greedy and selfish. People accused them of numerous crimes: adulterating bread with wood chips, soap, or rotten grain; baking underweight loaves. They made bitter jokes about it: weigh a dead baker and he'll come up short weight.[47] The bakers complained that it wasn't their fault—it was impossible to get absolutely uniform loaves, what bakers call "scaling." The police knew who was responsible because a baker had to carve his initials into every loaf. Making an anonymous loaf was also a crime, but, of course, harder to prosecute. The police practiced zero tolerance on short weight; loaves even an ounce or half an ounce light were seized. Historian Steven Kaplan, who did an extensive analysis of police archives and other public records for his book, *The Bakers of Paris and the Bread Question, 1700–1775*, did the math on what short weight cost the people of Paris each day: "perhaps between twenty-five hundred and three thousand four-pound loaves . . . enough to feed several thousand families."[48]

The punishments for bakers included fines, having their ovens destroyed or their shops walled up, having their crimes published in the paper, or being forced to wear them on a sandwich board and march through the streets. For serious or repeat offenses there was jail time, loss of master status, or even expulsion from the guild. Sometimes the police just looked the other way and let angry customers—often women—beat the bakers up.[49] At the bread market at Les Halles on Wednesdays and Saturdays, the average stall displayed "1,530 pounds of bread distributed as follows: 26 twelve-pound loaves, 40 eight-pound loaves, 101 six-pound loaves (mostly round), and 73 four-pound loaves (mostly long)."[50] Competition for customers was fierce. The bakers, male and female—and sometimes bakers' wives—got into fist or knife fights. Women were also the delivery people—*porteuse*, or female porter. On their backs, they carried baskets with as much as 100 pounds of bread long distances and up four or five flights of stairs.[51]

French bread was made from flour, water, salt, leavening, and massive amounts of human labor. The leavening was a starter that took up to fifteen hours to ripen, had to be fed and rested three or four times during kneading, and made a bulky dough that wore the bakers out wrestling with it—they had to knead 200 pounds by hand in forty-five minutes. Sometimes they jumped on the dough and kneaded it with their bare feet. As Parmentier knew, this process was brutal on the bakers; the bread got more rest than they did. When some bakers switched to barm—brewer's yeast—because it rose faster and made the dough easier to work with, there was a public outcry. French physicians declared that brewer's yeast "shocked" the flour into rising instead of leading it gently; that it made the bread less white; and that it would have the same toxic effects on the human body as beer—altogether not French.

The Salt Tax—*Gabelle*

Another sore point was salt. French bread needed salt, but because chemistry was in its infancy, they didn't understand what it did besides improve the flavor. It also controls the yeast, stops bacterial growth, makes a finer-grained loaf that looks whiter and has a deeper crust. The salt tax—*gabelle* (gah BELL)—was levied erratically. The *gabelle* might be high in one village, low in the next. This encouraged smuggling and corruption. Tax collectors were thugs paid to terrorize the peasants to force them to pay. They broke into houses at dawn, searched people in bed, causing pregnant women to miscarry. They took the peasants' property; sometimes they took the peasants and sent them to jail without notifying their families.[52]

Hunger, tension, and street violence mounted. Finally, the king called a meeting of all the classes, the *états generals*. The third estate, which wanted major changes in the government, sat on the left side of the hall; the moderates sat in the middle; and the conservative nobles of the second estate, who wanted nothing to change, sat on the right. This is where politics gets its terms "left wing" and "right wing." Since the right wing had all of the political power, nothing changed—then. However, on July 14, 1789, rumors spread through the city that the king had sent armed guards to turn on the people. They stormed the Bastille (bah STEEL), the prison in the center of Paris, to get ammunition.

Holiday History

BASTILLE DAY

July 14, 1789, is French Independence Day. It is to the French what the Fourth of July is to Americans and is celebrated the same way—with fireworks and feasting. In the 1970s, Alice Waters began celebrating Bastille Day at Chez Panisse, her restaurant in Berkeley, California, with an all-garlic menu; the garlic harvest in northern California is at about the same time. This sample menu is from *The Chez Panisse Menu Cookbook*. Every item, including the sherbets, has garlic in it.[53]

Garlic Soufflé
Baked Fish with Garlic Confit
Roast Squab with Garlic-and-Liver Sauce
Fettuccine with Fresh Chestnuts
Romaine and Rocket Salad with Garlic
Two Wine Fruit Sherbets

The Women March: "The baker, the baker's wife, and the baker's boy"

On October 6, 1789, three months after the storming of the Bastille, French women went to market. There was no bread. Their children would starve. No more! The angry women grabbed stones, sticks, pitchforks, and marched to Versailles. It was twelve miles, and it was raining. They were going to get the queen and "fricassee her liver." The people hated the queen because she spent fortunes on clothes and entertainment, did not produce a royal heir for eight years after she married the king (through no fault of hers), and was Austrian. When she was informed that the people were starving because they had no bread, the queen supposedly laughed and said, "Let them eat cake"—really brioche, bread dough enriched with egg and butter.

When the women arrived at Versailles, the palace guard, whose only job was to protect the royal family, joined the women instead. The women got food: they ransacked the kitchens at Versailles. At gunpoint, King Louis XVI, Queen Marie Antoinette, and their son the dauphin (prince) were taken back to Paris and locked up in the Bastille. On the march back, the victorious women chanted that they had gotten "The baker, the baker's wife, and the baker's boy."

On June 21, 1791, the royal family tried to escape to the queen's brother in Austria. They had almost reached the border when a postmaster recognized the king, even though he was disguised as a servant, because his picture was on all the French money. Rumors spread that the king was disguised as a chef. Political cartoons showed the royal family with pig faces, or the king eating pigs' feet. They all implied that the king only cared about "pigging out" and sticking the people of France with the bill while they starved.[54] The royal family was brought back to Paris. The king's head was chopped off by the blade of the guillotine (GHILL oh teen), then put on a stick and passed around Paris. Marie Antoinette was beheaded, too, after a light last meal of vermicelli soup. Their son, the dauphin, died in prison.

The Terror

In 1793, the revolution took a turn towards terror under the rule of Robespierre, a vegetarian. With the nobles executed or out of the country, the revolution turned on ordinary people and accused them of being enemies of the state. Thousands were sent to the guillotine for trivial reasons like serving bad wine or just knowing a noble person. It was during the Terror that the man who had been the queen's chef for ten years was executed. On July 27, 1794, the Terror ended when moderates seized control and sent Robespierre where he had sent so many others—on a one-way walk up the guillotine steps. The location where the guillotine stood is now the Place de la Concord.

THE NAPOLEONIC ERA: 1799–1815

In 1799, a young general named Napoleon Bonaparte seized control of the French government by marching in with the army and declaring he was in charge. The French Revolution and the Napoleonic era that followed brought about cultural changes much more profound than the American Revolution had. The French Revolution created a truly new society with new classes, new values, and new ways of treating people. The first estate, the clergy, was now under the control of the government. The second estate, the nobility, was gone—dead or fled. The third estate—the bourgeoisie, the peasants, and the urban poor—could vote now, which meant they could set reasonable taxes for themselves. And their taxes paid for schools for their children, not for some noble's château or banquet.

"And the restaurants, how many new marvels!"[55]

The changes in the world of cuisine were also profound. The French Revolution changed what, where, and how people ate. The bourgeoisie had more money, since fifty percent of their income wasn't going for taxes, and they wanted to eat well. Out of the ashes of the revolution emerged the modern restaurant, a purely French invention that began in Paris.

The revolution also ended the medieval guild system. The food industry shifted from arguing over which guild controlled which food to which establishment could sell what kind of food to the public. In 1830, a café owner was sued for impersonating a restaurateur because his menu contained 120 items, too many for a café, and he also served lunch.[56]

Food Fable

According to legend, a Mr. Boulanger opened the first restaurant in 1765, in Paris, before the revolution. But historian Rebecca Spang, in *The Invention of the Restaurant,* states that restaurants were more than a novelty in pre-revolutionary France. They "responded to eighteenth-century elite culture's preoccupations with the pursuit of health as well as to its fascination with cuisine." And eighteenth century Parisians knew Mathurin Roze de Chantoiseau, one of twelve cook-caterers to the king, as the inventor of the restaurant.[57]

These new eating habits needed new words to describe them. The words connected with the restaurant are French. A soup that was supposed to restore the health was called a "restorer"—in French, *restaurant.* Other French words are *restaurateur*, the owner of a restaurant; and *menu*, from the French word for "small," because the menu is a small description of the larger dishes. The eighteenth-century French believed that starting

a meal with soup would restore the health, still a custom in twenty-first-century restaurants, and not just in France. Grimod de la Reynière was the world's first restaurant critic; his *Almanach des gourmands* was the world's first restaurant guide, before the brothers Michelin and the husband-and-wife team of Tim and Nina Zagat. The word *gastronomy* appeared for the first time in 1801, as the title of a poem. It referred to the Greek *Gastronomia*, written by Archestratus in the fourth century B.C. This was followed by *gastronome*, a person familiar with good eating.[58]

Brillat-Savarin: "You Are What You Eat"

Perhaps the first gastronome was Jean Anthelme Brillat-Savarin (bree AHT), whose most famous quote was "Tell me what you eat, and I will tell you what you are." His book of meditations on food, *The Physiology of Taste*, was published in 1825. He also said, "Gastronomy is the intelligent knowledge of whatever concerns man's nourishment."[59] As an upper-class man, he spent two years of the French Revolution hiding out in America, part of the time in Hartford, Connecticut (if he ate Election Cake, he didn't mention it). He also lived in New York City. He had nothing but praise for the American table. The food was absolutely fresh—freshly grown, freshly milked, freshly killed—and there was plenty of it. He knew, because while he was there, he went on a turkey shoot. Brillat-Savarin said that the riches of the Americas were not gold but potatoes, vanilla, and cocoa. He loved the treasures of France, too: "The truffle is the diamond of the art of cookery."[60]

Brillat-Savarin listed the reasons he loved restaurants: you can choose when to eat, how much to spend, what kind of meal to have; you can have the best of what France has to offer, and luxuries imported from all over the world. He is an observer of the wide variety of people who eat in restaurants, too—the ones who eat alone, the country families, married couples, lovers, the "regulars," the foreigners. He points out a pitfall: eating in restaurants is so seductive that it is easy to slip into debt to do it. After all, "A restaurant is Paradise indeed to any gourmand."[61]

Carême: The Architect of French Cuisine

> "Antonin Carême is probably the greatest cook of all time."
>
> —food historian and chef Anne Willan[62]

Antonin Carême was the first celebrity chef, a legend in his own time and a true rags-to-riches story. Carême came to food as a profession not out of love, but out of dire necessity. In 1793, the year Louis XVI and his head parted company via the guillotine, Carême's impoverished parents (they had twenty-four or twenty-five children) turned the illiterate ten-year-old boy out into the street to fend for himself and wished him

good luck. The boy was no fool—he found work in a kitchen. He rose quickly and became a pâtissier. He taught himself to read and in 1815, by the time he was thirty-two, had published two best-selling books, *Le Pâtissier royal* and *Le Pâtissier pittoresque*. Twelve years later, he had learned everything he could about the other branches of cooking and was one of the best chefs in France. His cooking was legendary even then. One dinner, for the Rothschild family, required an "enormous salmon" and a pound of truffles, shaved and turned and applied to the fish to look like scales.[63] He made Napoleon's wedding cake.

He was also in demand all over Europe. England's Prince Regent offered Carême a salary he couldn't refuse, about $300,000 in today's money. The Prince loved Carême's cooking so much that he even ate in the kitchen once—after a red carpet had been laid on the floor. But homesick Carême returned to Paris after a year. He went to Russia, where he was sometimes invited to dinner as a guest, not as a cook. But it was too cold, with only inferior hothouse vegetables available for six months of the year. Vienna was better, but France was just right for him, and that is where he spent the rest of his life.

Carême brought some Russian cuisine and culture back to Paris with him: the soup, borscht; the elaborate multi-layered fish and pilaf en croûte called *koulibiac* (coo LIB ee ahk); decorating the table with fresh flowers instead of porcelain centerpieces; and table *service à la russe*—Russian table service, in which the dishes were presented one after the other instead of all at once, as had been done in Europe since the Middle Ages. *Service à la russe* reflected the enormous wealth of the Russian nobility, because there had to be a vast supply of dinnerware and servers to bring and remove the dishes.[64] Carême also invented many dishes: a chestnut pudding named after the Russian minister to Paris, Nesselrode; Veal Prince Orloff (or Orlov), after a Russian nobleman; and the molded dessert Charlotte Russe, Bavarian cream in a ring of ladyfingers.

Carême was a genius at organization. He brought order and consistency to French cuisine. He organized the sauces on which French cuisine is based into a modular system: five leading or mother sauces were the basic building blocks. By adding wine, herbs, cheese, vegetables, etc., to these five basic sauces, hundreds more could be created. These were called small or daughter sauces. The five leading sauces are béchamel, velouté, espagnole, hollandaise, and tomato. Two—espagnole and hollandaise—are named after the countries where they originated, Spain and Holland; béchamel is named after the chef who invented it (or perhaps after an Italian chef, Besciamella); tomato is named after its main ingredient. Only one sauce, velouté, has a name that describes the sauce. In French, *velouté* means "turned into velvet," and when it is made right, that is the truth.

Carême also stressed presentation. He believed that "the principal branch of architecture is confectionery." For centerpieces, he re-created the Greek and Roman ruins, Egyptian pyramids, Chinese pagodas, ships

and fountains that he had researched in the library. These constructions, several feet high, were called *pièces montées.* Made of spun sugar, marzipan, meringue, and sugar paste, they lasted for years. Carême worked the sugar by immersing his hands in ice water, then straight into the boiling sugar, then back into the ice water.[65]

He also created art in the new branch of cuisine that arose after the French Revolution, the cold buffet with *chaudfroid* (hot-cold) dishes—foods that are cooked first, then coated in aspic and served cold. In 1833, this genius wrote his last book, which would define French cooking throughout the nineteenth century. The king of chefs and chef of kings died the same year.

The Chef's Uniform

The word *chef*, short for *chef de cuisine*—head of the kitchen—also came into use at this time. Earlier, chefs were called cooks or master cooks. With professionalization came the language of the kitchen, names for positions in the profession, and a way to distinguish people in the profession—a uniform patterned after French army uniforms.

The chef's uniform has two practical functions: (1) to protect the chef from the food; and (2) to protect the food from the chef. In the first case, the long sleeves, long pants, and double-breasted jacket are a barrier against burns, spills, and splatters. The black-and-white houndstooth check pattern on the pants is camouflage—try to find the stain. Sturdy shoes guard against falling equipment and knives. Non-skid soles provide traction on floors slippery from spilled food and grease. In the second case, the long sleeves, double-breasted jacket, and neckerchief protect the food from a sweating chef. The *toque blanche*, the tall white chef's hat, keeps the chef's hair out of his eyes and out of the food and also, like the stars on a general's hat or the distinctive hat of an admiral, makes it easy to see who is in charge in a crowded kitchen. Before Carême, the chef's hat was floppy; he put cardboard in his to make it stand tall. The toque is supposed to have 100 pleats, to represent the minimum number of ways a good chef can prepare eggs. (In *The Culinary Guide*, in 1903, master chef Escoffier lists 202 ways to prepare eggs, *excluding* omelettes, which are another eighty-two recipes and a note that "Using the basic recipe for Omelette Norvégienne it is possible to produce an almost infinite number of variations of this type of omelette (Omelette Surprise)."[66]

The uniform couldn't protect cooks against one serious kitchen hazard: carbon monoxide (chemically, CO) poisoning. Carbon monoxide binds to the hemoglobin in blood, preventing it from carrying oxygen to the body's tissues, including the brain. CO gas is odorless, colorless, and therefore impossible to detect. It is produced by using charcoal fires indoors with inadequate ventilation. CO poisoning was so common among cooks in France that it was called *folie des cuisiniers*—"cooks' craziness"—

because of its symptoms: bizarre behavior, disorientation, and loss of muscle coordination. It also turned the face a bright cherry red, which could make a person suffering from CO poisoning look drunk.[67] This gave cooks a bad reputation. And it possibly killed Carême.

"Damn sugar, damn coffee, damn colonies!"—Napoleon[68]

It was 1802. Napoleon was furious. He wanted to recover the land that had been lost in wars with England, rule all of Europe, and restore France's empire. He was becoming frustrated on all counts.

In the Caribbean, his troops had failed to retake the sugar- and coffee-producing island of Saint Domingue (Haiti) from rebellious slaves. Now, 20,000 of his troops were dead, killed by Toussaint L'Ouverture, the leader of the slaves, and by yellow fever, a disease spread by mosquitoes. (The Spanish name for the disease is much more descriptive: *vomito negro*.)

In Europe, the powerful British navy blocked ships from French ports. Napoleon tried to make France self-sufficient. If he couldn't get sugar from sugarcane in the Caribbean, then he would grow sugar beets at home. The sugar beet proved to be an excellent source of sugar. Napoleon's decision contributed to the decline of the Caribbean economy and changed the sugar-eating habits of the world.

Napoleon's wars were becoming expensive. How to finance them? He would have to sell some real estate. Fast. But who would buy?

Jefferson, the Francophile President

Jefferson was a Francophile—he loved France and all things French. While he was the American ambassador to France from 1784 until the French Revolution began in 1789, he ate and loved Continental food. He traveled widely in Europe, sampling food and wine everywhere he went. He bought a waffle iron in the Netherlands after he tasted waffles, sent a messenger to Naples to buy a "maccaroni mould," learned about winemaking in France and Germany, about butter and cheese making in Italy. He took a slave with him to be trained by French chefs. After he returned to America, Jefferson granted the slave his freedom, but only after he trained a replacement. Jefferson also brought crates of pasta and the word *macaroni* back with him. (The word *spaghetti* didn't appear in America until the 1849 edition of *Modern Cookery for Private Families* by Eliza Acton.)

In Washington, Jefferson bemoaned the lack of olive oil, vinegar, *moutarde d'Estragon* (tarragon mustard), etc. He imported food and wine from Europe, engaged in voluminous correspondence with horticulturalists in the United States and Europe, went to the market with his French chef, kept notes on which fruits and vegetables ripened when. While he was president, Jefferson instituted two new procedures for keeping wait-

staff out of the presidential dining room, because he didn't want them to overhear what was going on and gossip. One was a "dumb waiter," a small, unmanned elevator with shelves so that food could be sent from the kitchen to the dining room. The other was a special wall with built-in shelves. Used dishes were placed on the shelves in the dining room, Jefferson pressed a button, and the wall turned, sending the used dishes to the butler's pantry and dishes with fresh food into the dining room.

Jefferson also brought democracy into international etiquette. Until then, seating at state dinners was rigidly controlled, with great attention given to who sat where. Foreign dignitaries were given the place of honor, usually at the right hand of the ruler of the country they were in. Jefferson declared this undemocratic, and said that seating would be "pell-mell" (now pall mall)—sit where you want, without regard to rank. Some were insulted.

In Virginia, Jefferson's plantation, Monticello, had 5,000 acres of orchards, fruit and vegetable gardens, and numerous outbuildings. Although there was a tea room and a dining room, there was no kitchen in the house. On Southern plantations, the kitchen was a separate building, to keep the heat out of the main house and also to avoid accidentally burning the main house down. To take a virtual tour, log onto www.monticello.org. Meats were hung in a separate smokehouse. To see more of a Southern plantation, log onto cwf.org.

Jefferson, "The Big Cheese"

The 1,235-pound cheese couldn't be ignored. It arrived in Washington, D.C., on New Year's Day 1802, a gift to President Thomas Jefferson from the citizens of Cheshire, Massachusetts (and 900 cows). This large food also had a political and religious purpose. The cheese had a motto printed on it: "Rebellion to tyrants is obedience to God."[69] It was the public relations brainchild of a Baptist minister, one of the leaders of the new religious movement that was sweeping America and came to be called the Second Great Awakening, as people everywhere awoke to their inner religious feelings. Americans made pilgrimages to see the big cheese in the White House. And that is how the president of the United States became "the big cheese."

In 1803, the Big Cheese was worried. President Jefferson had just bought 828,000 square *miles* of land from Napoleon, and his conscience was bothering him. Nowhere did the Constitution say that the president, by himself, could pick up a pen and double the size of the country, not even at the bargain price of three cents an acre. He had authorized the American ambassador to buy New Orleans so the American farmers who were swarming west over the Appalachians into the Ohio River Valley would have a seaport to get their produce to Europe. To trade with other Americans, any foodstuffs from the Ohio River Valley could be floated downriver to where three rivers—the Ohio, the Allegheny, and the Monongahela—met at Pittsburgh. But to trade with Europe, they had to continue

down to the mouth of the Mississippi, to New Orleans. The Americans owned Pittsburgh; the French owned New Orleans, which angry Americans were talking about attacking and taking by force. This would throw the new, small United States into a war with a European superpower headed by Napoleon, a military genius. President Jefferson hoped that Napoleon would sell New Orleans to the United States. He was stunned when Napoleon gave the go-ahead to sell everything France owned on the North American mainland. It was one of the greatest real estate deals in history.

But what exactly had America bought? A shortcut to the riches and markets of China and India, they hoped. Maybe this, finally, was the Northwest Passage, the water route through North America to the Pacific Ocean and on to Asia that Columbus, Hudson, Champlain, and the other explorers had not been able to find. Maybe by going north, up the Mississippi River to its headwaters, they would discover a route to Asia. Two years later, Lewis and Clark returned from their exploration with disappointing news—no Northwest Passage.

New Orleans—Creole Cuisine

New Orleans, however, was not a disappointment. Its Creole cuisine—ruling class French and Spanish cuisine prepared by African cooks, with some Native American elements—is unique in America. A prime example of this fusion food is gumbo, a sausage and seafood stew. The word is African and so is the use of okra—an African word for an African vegetable—as a thickener. But the roux base is French, the combination of sausage and seafood is southern Mediterranean, like French bouillabaisse, and the seasoning is filé—powdered sassafras leaves obtained from Native Americans. Another New Orleans speciality, jambalaya, comes from *jambon*, French for "ham," and *ya*, an African word for "rice"; étouffée means "smothered," but is more like a stuffing for seafood.

Beginning in 1791, New Orleans residents could buy fresh turtles, crabs, vegetables, or slaves at La Halle, the French marketplace. After 1812, travelers, gamblers, and other characters sailed up and down the Mississippi on luxurious steamboats with ballrooms, bars, and casinos.[70] Louisiana bills itself as the "Sportsman's Paradise" because of the abundance of deer, quail, duck, and other wild fowl. Prepared meats are everything from sophisticated sausages like boudin, to barbecue, to real fried pork rinds with streaks of pork (nothing like the pre-packaged Styrofoam). The Gulf of Mexico provides shrimp, oysters, and crawfish. As elsewhere in the South, corn appears as grits and hominy. Louisiana is also famous for two foods of Asian origin, rice and sugar. Pralines are a pecan, butter, and brown sugar patty. At sidewalk cafés, people snack on beignets—fried pastry puffs dusted with confectioners' sugar—and chicory coffee. It is also the home of Bananas Foster, Oysters Rockefeller, Tabasco sauce, and a very special holiday, Mardi Gras.

Holiday History

MARDI GRAS AND *CARNEVALE*

In Christianity, January 6, twelve days after Christmas, is when the three kings who had been searching for the newborn Christ child found him. In Louisiana, it marks the end of the festive Christmas season and the beginning of the festive Mardi Gras season. *Mardi Gras* is French for "Fat Tuesday," the last day of feasting before Lent and its forty days of fasting begin on Ash Wednesday. The first official Mardi Gras celebration in New Orleans was in 1827, although other celebrations had been occurring in French America since 1718. A fancy dress ball kicks off the series of parades with kings and queens, special Mardi Gras jewelry, and a special King Cake in the official colors of Mardi Gras—purple, gold, green. Other pre-Lent celebrations occur around the world. One of the largest is in Brazil, where it is called *Carnevale* (which means "good-bye, meat"), and samba clubs practice special dances all year for the festivities. (Also see Butterweek, in Chapter 10.)

The King Cake has a tiny plastic baby doll baked inside. Traditionally, the person who gets the piece of cake with the baby in it is king or queen for a day and then has to provide the next party. The custom dates back to the ancient French custom of baking a lucky bean—*fève*—into the bread. The baby refers to the Christ child.

INGREDIENTS:

King Cake—The Cake with a Baby Inside[71]

2 cups sugar
½ cup butter
2 cups flour
½ cup water
5 egg yolks
6 egg whites
½ teaspoon baking soda
1 teaspoon cream of tartar
juice of 1½ oranges
1 tiny plastic baby doll

Americans and foreigners wanted to meet the Americans who had played such prominent roles in the revolution, so they dropped in on them at their homes. After he retired, George Washington complained

that visitors to his Virginia home, Mt. Vernon, were turning him into an innkeeper. At Monticello, as many as fifty unannounced guests would drop in at once, stretching the facilities and Jefferson's pocketbook. Congress provided no funds; the former presidents were expected to pay for these expenses themselves.

Thomas Jefferson, the third president of the United States, and John Adams, the second president, one from the South, one from the North, of different political parties, died on the same day, within a few hours of each other. The day was July 4, 1826—exactly fifty years after the Declaration of Independence, which they wrote.

"An Army Marches on Its Stomach": The Invention of Canned Food

In 1803, armed with the $15 million he got from the United States for the Louisiana Purchase, Napoleon proceeded with his plan to conquer Europe. First, he wanted to make sure his troops had good French food. He was looking for something better than the salted, dried, or smoked food armies usually got. These methods of preservation altered the taste and texture of food, and not for the better. So he offered a prize of 12,000 francs (U.S. $250,000 today) to the first person who could do this.

In 1810, a chef named Nicolas Appert won the prize and published his book, *L'Art de Conserver Pendant Plusieurs Années Toutes les Substances Animales et Végétales*—"The Art of Conserving for Several Years All Animal and Vegetable Substances." Appert, born in 1750, grew up in the wine cellars and inns of Champagne, helping his father, an innkeeper. By the time Appert was twenty-two, he was an accomplished chef; by thirty-one, he had his own confectionery shop in Paris. He was also passionate about preserving foods. He wanted to find a new method, one that would preserve the base of French cooking, the sauces.[72] For ten years, he experimented with ways to preserve food. He finally settled on packing the food in glass bottles—Champagne bottles at first, because he could get so many—and boiling them in a *bain marie* or water bath. The food tasted good, much better than what other methods produced. Then Appert got lucky. Food critic La Reynière liked what Appert was doing and wrote about him in his food column. However, food packed in glass was not practical in the armed forces. The bottles would be tossed about on the navy's ship, and jostled over bad roads or no roads by the army. The country that ended up getting the patent on Appert's invention and mass-producing it was England, because it was more industrialized than France and had a highly developed tin industry. The cans, made by hand, were flat on top. They had to be opened with a hammer and chisel until the middle of the nineteenth century, when Americans invented the can opener.

Scorched Earth in Russia

Losing his colonies in the Americas increased Napoleon's obsession with conquering Europe. In 1812, he invaded Russia. Russia employed a "scorched earth" policy: they burned their grain and slaughtered their livestock so Napoleon's troops wouldn't be able to live off their land, even though it meant they would starve, too. Napoleon marched into Russia with a *Grande Armée* of almost 600,000 men, the largest European army up to that time. He limped out with maybe 50,000.

How did the man who said "An army marches on its stomach" let hundreds of thousands of his men starve to death? Napoleon's retreat from Moscow is one of the greatest examples in history of how lack of preparation led to disaster.

After battling his way across Russia, Napoleon arrived in Moscow, the capital. But the city was deserted. Everyone had left, including the czar, who didn't surrender. Fires broke out, men looted. They feasted on luxuries stolen from the palaces of the nobles: figs, liqueurs, jams. Then, just as winter was coming, Napoleon ordered everyone back to France. No preparations had been made, except that Napoleon said that small hand mills would be given to each man so he could grind fresh flour for bread. When they marched out of Moscow, the men had grain, but no mills.

In Napoleon's army, as in nineteenth-century European society, what kind of food you had depended on your social class. Napoleon traveled with a gold dinner service and "always had white bread, linen, . . . good oil, beef or mutton, rice and beans or lentils, his favourite vegetables."[73] The officers had private chefs and carriages stocked with three to four months' worth of food, as one wrote in his diary: "more than 300 bottles of wine, 20–30 bottles of rum and brandy, more than 10 pounds of tea and as much again of coffee, 50–60 pounds of sugar, 3–4 pounds of chocolate, some pounds of candles."[74]

But missing were staples: "white bread, fresh meat and *vin ordinaire* I had none," wrote another officer.[75]

Cooks were very valuable. A cook could make stringy horse meat palatable by turning it into curry,[76] or transform horse's blood into blood pudding. With a cook, it was still possible to dine properly:

> a splendid supper, with Madeira and Bordeaux wines, and an abundance of mocha coffee and liqueurs from the isles of the Indies! My cook . . . prepared horsemeat marvellously [sic] and all my guests thought I was serving them beef!"[77]

And you guarded that cook—in one case, six soldiers were assigned to protect one cook. One officer was astounded to find out that the young man who had been cooking for him, driving his carriage, and taking

care of his horses was really a fourteen-year-old girl who had disguised herself to be with the soldier she loved.[78]

The class differences were fatal: "In the same regiment some companies were dying of hunger while others were living in abundance."[79] The enlisted men had what they could carry in their backpacks. By the time the grain mills Napoleon had promised arrived, the men had long since abandoned the grain because it was too heavy. They abandoned the mills—and their muskets and backpacks—for the same reason. The wagons carrying the heavy guns and ammunition were left by the road, too. But when they abandoned their axes, the men couldn't chop down trees for firewood to melt snow, or break holes in the frozen rivers and ponds to get water. The horses, also dying of thirst, exhausted themselves pawing at the thick ice. Lack of preparation had extended to not putting nails in the bottoms of the horses' shoes—the equivalent of tire chains (except for the Polish soldiers). Foraging was dangerous: the Russians were foraging for foragers so they could torture and kill them. This resulted in an ironic justice: luxury items from the houses of the upper classes in Moscow ended up in the hands of Russian peasants, via Napoleon's army.

Winter moved in fast. In sleet, snow, fog, and temperatures down to −18°F (−28°C), wagon wheels sank deep in mud; icicles hung from the men's beards; wine froze: "we had to break our wine by hitting it with a hatchet and putting it over the fire."[80] That was in November. In December it got really cold, down to −34°F.[81]

The men were starving and freezing to death but they looked like they were going to a costume party. This was "The Masquerade" as the men put on whatever clothing they had stolen in Moscow: men's or women's silk opera capes, fancy plumed hats, negligees. Desperate men ate chunks of flesh torn off of living horses too cold and stunned to object, or the bark off trees or took "some fistfuls of flour dipped in melted snow."[82]

RECIPE:

"Spartan" Broth

"It wasn't always we had some horsemeat or aquavit. . . . It was then we prepared our thin Spartan broth. Here's the recipe: Melt some snow—and you'll need plenty to get only a little water. Put in some flour. Then, for lack of salt, some gunpowder. Serve up hot and only eat when you're really hungry."[83]

Dead men and those too cold or close to death to protest were eaten by flocks of crows and "hordes of dogs." Before the march was over, they had descended to murder, suicide, and cannibalism.

When thousands of these starving men arrived at Vilna, Lithuania, on December 8, they completely overwhelmed the restaurants in the small town. Men ate and ate and ate—and died, their bodies lacking the enzymes and energy to digest food. Typhus, a disease spread by body lice, killed thousands more.

The Russian people and the Russian winter had been formidable foes and Napoleon had lost. It was an expensive lesson, but not one that another European dictator would learn from. One hundred thirty years later, Hitler, too, would be beaten by the fierce determination of the Russian people and the Russian winter.

But Napoleon wasn't done yet. His final defeat came at the hands of the British and Prussians at Waterloo, Belgium, in 1815 (hence the expression, "Napoleon met his Waterloo"). The British took no chances: they exiled Napoleon to the tiny, remote island of St. Helena in the middle of the Atlantic Ocean, originally founded as a refueling port for the British fleet on its way to the Spice Islands, and in 1821 he died there.



Food Fable



NAPOLEON AND WELLINGTON

The dessert called the Napoleon, also called *millefeuille*, because it is made of many (*mille*—a thousand) layers or leaves (*feuille*) of pastry, isn't named after Napoleon. It's named after the city where it was invented—Naples.

The British Duke of Wellington was the man who, along with the Prussians, defeated Napoleon at Waterloo. Beef Wellington is an elegant filet or chateaubriand spread with foie gras or pâté and duxelles, then rolled and baked in a pastry crust.

NAPOLEON'S AFTERMATH

America's Second War for Independence

England took advantage of France's preoccupation with Europe to try to retake the United States. In 1815, the same year Napoleon was defeated at Waterloo and Carême published his book, the United States won the last battle of the War of 1812. The treaty that ended the war was signed in December 1814 in Belgium, but news hadn't reached the United States yet. Still, it was fortunate that a ragtag group of American backwoodsmen, last-minute militia, sailors, free blacks, and French pirates, heavily

outnumbered, beat the British at the Battle of New Orleans. No land changed hands but the United States was still independent and beginning to gain respect as a power to be dealt with. And the commander at New Orleans, Andrew Jackson, became a hero, which helped elect him to two terms as president.

South America Revolts

Napoleon also caused revolutions throughout Central America and Latin America. When Napoleon invaded Spain in 1808, he placed his brother Joseph on the throne. The Spanish people refused to accept this Frenchman as their king and waged a guerrilla war for years. Spain's colonies felt even less loyalty to a French king. By 1841, all of the New World colonies that had belonged to Spain since the late fifteenth and early sixteenth centuries had formed into the countries that exist today. In 1830, Colombia splintered into modern-day Colombia, Venezuela, and Ecuador. Eleven years later, in 1841, Guatemala, Honduras, El Salvador, Nicaragua, and Costa Rica broke away from Mexico, weakening it. This was of great interest to Mexico's neighbor to the north, the United States, which was expanding rapidly and wanted more land.

Napoleon's invasion of Portugal in 1808 caused the monarchs to leave the country and set up the royal court in Rio de Janeiro, Brazil, for several years. When the monarchs returned to Portugal, Brazilians received their independence.

Europe's Struggle for Democracy

The common people in Europe, inspired by the democratic revolutions in America and France, tried to replace their monarchs with democratic governments. They were repeatedly put down by force. After the failed revolutions for democracy in 1848, many Germans wanted to live in a country where they could vote and have a say in how they were governed. They would leave, and take their cuisine—hot dogs, hamburgers, potato salad, and beer—with them. They would start over in America.



Eighth Course

From Coyotes to Coca-Cola: THE NINETEENTH CENTURY IN AMERICA

"GO WEST, YOUNG MAN!"

In the 1840s, America was in a fever to head west. "Manifest Destiny" was the idea that the restless American people were destined to rule North America "from sea to shining sea." They had already invented technology to connect the country as far west as the Mississippi. In 1807, Robert Fulton's steamboat sailed up the Hudson River, against the current. In 1825, the Erie Canal provided a cheap water route from the Ohio River Valley through Buffalo to New York City in a fraction of the time and cost of land transportation, making more food more affordable. With states in the west functioning almost as its colonies, New York became the Empire State. At the end of the 1820s, the first railroads were built in the U. S. In 1844, the wires talked—Samuel Morse invented the telegraph and the code to transmit messages.

But west of the Mississippi was unknown territory until John Fremont—the "Pathfinder"—and his expedition returned in the early 1840s. (Lewis and Clark had gone north, almost to the Canadian border.) Fremont returned with maps, a route—approximately where Interstate 80 runs now—and stories, mostly written by his wife Jesse. The good news was that there was good farmland in California, which was owned by Mexico, and Oregon, which the British claimed.

Going west was not cheap or easy. Each adult needed 400 pounds of provisions, wagons to carry them in, oxen to pull the wagons, and enough money not to have to work for the time it took to go west and to start a business. So the majority of those who went were prosperous white farmers from families who had been in the United States for generations. Few free blacks could afford the trip. Some immigrants went, usually as servants. Inexperienced pioneers packed everything they owned into their wagons and ended up dumping about half of it along the way. The smart ones brought milk cows because there was no dairy industry in California yet and milk was very valuable.[1] Almost everybody walked, because the burden on the valuable farm animals would have been too much, and because it was more comfortable. There were no roads, and the wagons had wooden wheels and no springs. They only had a few months to cross, so they didn't stop for births or deaths. Breadstuff was the staple on the overland trail—wheat flour baked into yeast-risen bread in a Dutch oven when they had the time and the fuel; biscuits, crackers, and cornmeal when they didn't. They supplemented this with coffee, sugar, salt, bacon, and dried fruit.

These farmers from the flat, fertile Midwest had no real understanding of the terrain they were heading into. They figured that they could shoot or trap game along the way, as they had at home. Not always. And they found out the hard way what a desert can do to living things and even inanimate objects. They counted on covering about twenty miles a day, but had no idea that the short stretch on the map called "Forty-Mile Desert" in what is now Nevada would take them not two days of walking, but at least five; that many of their oxen would die or go crazy from thirst; and that the curved wood in their covered wagon frames and wheels would dry out, straighten, and splinter. Desperate people ate "bush-trout"—rattlesnakes. People dying of thirst drank their mules' urine or paid $15 for a glass of water when they could get it.

How to Cook a Coyote

The desert wasn't the worst of it. Coming out of the forty-mile crossing exhausted, weak, and low on food, they faced mountains more than 14,000 feet high. The Spanish name—Sierra Nevada—means "snowy peaks," because the snow sometimes stays until July. The famous Donner Party from Illinois, stranded for months in the snow above 6,000 feet during the winter of 1846–1847, butchered their dead. They took great care to label the body parts so no one would accidentally eat a relative. Forty-seven people lived by eating the forty who died.[2] (Years later, Mormons trapped in the snow without food on their way to Utah chose to die rather than turn cannibal.)

In another case of being stranded in the snow, desperate eighteen-year-old Moses Schallenberger, who had fallen behind and been left by his wagon train, decided to try to trap something, anything:

> I found in one of [the traps] a starved coyote. I soon had his hide off and his flesh roasted in a Dutch oven. I ate this meat, but it was horrible. I next tried boiling him, but it didn't improve the flavor. I cooked him in every possible manner my imagination, spurred by hunger, could suggest, but couldn't get him into a condition where he could be eaten without revolting my stomach. But for three days this was all I had to eat.[3]

Moses was also able to trap foxes, which he found delicious, though their meat was "entirely devoid of fat," which he craved. He also caught many more coyotes, "but I never got hungry enough to eat one of them again."[4]

The Gold Rush: Feeding the Forty-Niners

After a war with Mexico from 1846 to 1848, the United States owned California and the land reaching to the Pacific Ocean. A treaty with England added Oregon to the U.S. In 1848, near what is now Sacramento in northern California, at a sawmill being built on the American River by a Swiss immigrant named Sutter, gold was discovered. The stories were fantastic—men dammed a river and found $75,000 in gold nuggets just lying in the dry riverbed; a man and his two sons picked up more than $9,000 each in a short time.[5] Historian John Holliday described the gold rush in the title of his book: *The World Rushed In.* And it was an almost totally male world. In the first five months of 1850, of the 17,661 people who passed through Ft. Laramie, Wyoming, on their way west, 17,443 were men.[6] They gravitated to taverns, saloons, bars, liquor, and gambling.

FOOD PRICE COMPARISON 1850–2002 (PER POUND)[7]

Item	1850—California Gold Fields	2002—Los Angeles Supermarket
sugar	.75	.89
dried beans	1.00	.75
potatoes	1.00	.99
baking soda	6.00	
coffee	.50	4.17
tea	2.50	(in bags) 5.38
vinegar	5.00	.90

No matter where the miners came from or what language they spoke, they all had to eat, and all the food had to be shipped in. Merchants who sold food got rich by mining the miners—they gouged. Five dollars then was the equivalent of about $100 today.

Cooking equipment suffered the same mark-up: tin pans and coffee pots cost $8 each, frying pans, $6. Water in a boarding house cost $20 per week; rent was $500 per month. With saleratus—sodium bicarbonate—selling for $6 per pound, the men opted for flour and water left out to ferment, leavened with wild yeast that settled from the air. A portion of each batch of this bread could be kept aside and fed to start the next batch. From these bread starters, the men became known as "sourdoughs." (For those who claim that San Francisco sourdough bread doesn't taste like any other, they're right. The organism in the air there—and only there—is *Lactobacillus sanfrancisco*.)[8] Even when food and equipment were available, nobody wanted to work unloading it or getting it out of the warehouses. Tons of food rotted, and there was nobody to clean it up. The men hated to waste time doing anything except looking for gold. Even roasting and grinding their coffee beans took too long. Folger's stepped in with the first pre-roasted coffee.[9] When the men complained that their pants kept ripping from all the hard work, a Jewish merchant from Bavaria named Levi Strauss teamed up with a Lithuanian tailor and took out a patent for denim pants held together with metal rivets—"Levi's" blue jeans.[10]

Yes, there was gold "in them thar hills," but there was malnutrition, too. No one who wrote home mentioned dairy or eggs except to note their absence. Butter from New York arrived brown after a year-long sea voyage around "the Horn"—the tip of South America. Cooks had to sift flour to get rid of weevils and pulled long black worms out by the handful. Gunpowder substituted for salt. A meal usually consisted of "coffee, bacon, beans, and hard bread," eaten standing or sitting on a log.[11] Scurvy killed about 10,000 miners in the 1850s until they started eating winter purslane, which they called "miners' lettuce."[12]

The Native Americans of California, who were described as "timid and friendly," lived on acorns and wild game they shot with bows and arrows. The massive population invasion had the same disastrous effect on them that the arrival of the Spanish had had on the natives of Central America 250 years earlier: they died. Between 1850 and 1860, the native population of California dropped eighty percent, and not from disease; this population had already been exposed to European diseases.[13]

The Gold Rush in California in 1849 was just the first of several mineral rushes. Later, silver was discovered in Nevada; gold in the Black Hills of South Dakota in the 1870s; and gold again in the Alaskan Klondike/Canadian Yukon in 1898. But the sane Canadians sent the RCMP—Royal Canadian Mounted Police or "Mounties"—in first. They turned back anyone who didn't have a six-month supply of food.

Stagecoach Food

In July 1861, Mark Twain, who later wrote the American classic novels *Tom Sawyer* and *Huckleberry Finn*, went from Missouri to Nevada Territory, which was experiencing a Silver Rush. He traveled by stagecoach and described the food at the stage stops. The cups and plates were tin, the main course was condemned Army bacon, and the breakfast beverage was called slumgullion: "It really pretended to be tea, but there was too much dishrag, and sand, and old bacon rind in it to deceive the intelligent traveler. He had no sugar and no milk—not even a spoon to stir the ingredients with." The manners matched: "Pass the bread, you son of a skunk!"[14] Only once was there real food between the United States and Salt Lake City, a breakfast of "hot biscuits, fresh antelope steaks, and coffee."[15]

American eating was fast. They didn't taste their food, they inhaled it. They sat down at the table and were done in five minutes. In boarding houses, service was *à la française*—all the food put on the table at once—but speeded up by an American invention called the Lazy Susan. This was a large platter on ball bearings in the middle of the table, which rotated so that every diner could reach every food.[16] (*Service à la Susan*?)

The people in the California territory wanted to become a state. But slave or free? Either way, California's entry into the union would destroy the balance in the Senate of fifteen free and fifteen slave states. California joined as a free state because the sourdoughs didn't want slave labor competing with them in the gold fields. The South's solution: buy Cuba from Spain and turn it into a slave state. But Spain wasn't interested. So the North and the South reached the Compromise of 1850. The North got the slave markets, but not slavery, ended in Washington, D.C. Southerners got a tough new Fugitive Slave Law to catch runaways—even though they claimed the slaves were happy and well-treated.

THE SOUTH

The slave-owning planter class, the ones who lived in mansions and had overseers, the way of life made famous in movies like *Gone With the Wind*, was about twenty-five percent of the white population in the South. Of those, according to the census of 1860, only 1,933 families owned more than 100 slaves. The vast majority of whites in the South were subsistence farmers who led difficult, hard-working lives:

> By any standards their lives were drab. Their houses more nearly resembled shacks than the mansions of tradition. . . . The produce of their small plantations included meat, grain, and vegetables for subsistence and tobacco, rice or other staples that could be sold for cash.[17]

Slavery and Soul Food: Not "Livin' High on the Hog"

Still, this was luxury compared to how the slaves lived and ate. Booker T. Washington, who was born into slavery and was the first principal of the Tuskegee Institute in Alabama (opened July 4, 1881; now Tuskegee University), wrote his autobiography, *Up From Slavery*, and described the slave cabin where he grew up. It was one room, fourteen by sixteen feet, where Washington lived with his mother, brother, and sister. It had a dirt floor, a hole in the center to store sweet potatoes, another hole in the corner to let the cats out, holes in the log walls to let light in, and a door falling off its hinges. His father was a white man but Washington didn't know who. The cabin was not just their home; Washington's mother was the plantation cook, so it was also the plantation kitchen. There was no stove; all the cooking was done on an open fire on the floor. Washington remembers his mother waking the children up in the middle of the night once for a feast, a chicken she had stolen.

In the South, what part of the hog you ate showed your rank in society. The plantation owner's family ate meat from "high on the hog"—ribs, roasts, hams. The slaves ate the outer limits—ears, snout, tail, feet or "trotters"—or the inner wasteland—the small intestines, called chitterlings or "chitlins." Chitlins were sometimes used by the whites, but as casings for sausage, not alone as food. Slave cooks prepared the meat from high on the hog but weren't allowed to eat it. They were also not allowed to eat beef, lamb, mutton, chicken, turkey, and geese, which were reserved for the plantation house.[18]

The labor force was not the only difference between kitchens in the North and the South. In the North, the kitchen hearth was the heart of the house. In the South, the plantation kitchen was separate from the house, just another outbuilding along with the dairy, the stable, and the outhouse. On large plantations, supplies were bought and animals slaughtered in bulk—barrels of flour and whiskey, dozens of chickens, thousands of pounds of hogs.[19]

Slave Cooks and Sisters

Fine Southern cooking and legendary Southern hospitality were made possible by the labor of women slaves. Food historian Karen Hess states that in the first half of the nineteenth century, all Southern cookbooks by white women were recipes they got from black cooks.[20] Slave cooks—almost all female—usually learned by doing, often a daughter at her mother's side, using recipes and methods passed on orally and hands-on from earlier generations. The white plantation mistress gave instructions but did not cook, so the black woman slave cook reigned supreme in the Southern kitchen. She had a skilled, high status job, she worked in the house, not the fields,

and she was proud of it.[21] Slave owners were afraid of their cooks because the cooks had the power to poison them—and sometimes did.

Slaves had no control of any part of their food supply. If the master allowed, they could supplement their diet with vegetables they grew on their own time on a patch of land near the slave cabin or with fish they caught. Slave women in particular, were at the mercy of the masters for food. Slave women who were good "breeders" and produced many children sometimes got extra food for their families. Often, those who didn't have children were sold.[22]

Some Northern white women began to think they had something in common with slaves, and to agitate for freedom for both. In the first half of the nineteenth century, a man could beat his wife legally as long as he used a stick no thicker than his thumb—the "rule of thumb." In 1848, approximately 100 white women and men gathered at Seneca Falls in upstate New York and wrote the Declaration of Sentiments, a Declaration of Independence for women. It stated that "all men and women are created equal," that women who earned wages were being taxed without representation, and that they should have the right to vote. Just as the Declaration of Independence had a list of grievances against King George III, the women had a list of grievances against men: men prevented women from going to college or into professional careers; passed divorce laws so that women could never get the children; made all property that a woman owned, whether inherited or earned, the property of her husband; and forced different moral standards on women.[23] The people who attended the convention were ridiculed mercilessly in the press. Nevertheless, a powerful movement had been set in motion, and women became more involved in efforts to abolish slavery.

Lydia Maria Child was one. She began as a novelist, then wrote *The American Frugal Housewife*. Published in 1829, it was the only cookbook she wrote and it was an instant best-seller. However, her books about rights for slaves and her position as editor of the *National Anti-Slavery Standard* put her on the fringes of American politics; *The American Frugal Housewife* was not reprinted after 1850.

Child's place was taken by Catharine Beecher and her *Treatise on Domestic Economy,* published in 1841. Beecher believed in traditional home-making for women and opposed the women's movement. She was a practical person and her book explains clearly how to manage a household with few or no servants. She was deeply concerned with all aspects of the health and well-being of everyone in the household, down to what the milk cow was eating.[24] Her *Treatise* provided anatomy lessons and life advice.

Catharine's sister, however, was very involved in the abolition movement, and in 1852, Harriet Beecher Stowe wrote *Uncle Tom's Cabin*, about the horrors of slavery and attempts by the slaves to make a break for freedom. It became the first blockbuster novel in history, electrified

Northerners into action, and caught on like wildfire in England. It was, of course, banned in the South.

The Underground Railroad and the Taste of Freedom

One of the ways slaves escaped was via the Underground Railroad. This wasn't a literal railroad. It was a series of "stations"— "safe houses" where they could hide and get food until they made it to freedom, sometimes Canada. Many of the organizers of the Underground Railroad were Quakers, who founded the first anti-slavery society in America in 1775, and blacks who were either born free in the North or escaped to freedom, especially black ministers. A famous "conductor" was Harriet Tubman, an illiterate black slave who suffered brain damage at the age of thirteen when her white master accidentally smashed her in the head with a lead weight and nearly killed her. Later she escaped from the South, then made nineteen trips back into slave territory and smuggled more than 300 slaves out to freedom. The North called her the "Moses" of her people; the South put a $12,000 bounty on her head.

What some runaway slaves remembered most about their first day away from slavery was the literal taste of freedom: the food, and how it was served. Sometimes they couldn't eat even though they were starving. They couldn't believe they were sitting at a table with white people who treated them not just as equals, but as betters: these white people waited on *them*, encouraging them to eat all the food they wanted. And what food it was!—food they had cooked and smelled and looked at and longed for all their lives but had never been allowed to eat. But once they started eating, they couldn't stop:

> I ate straight on for an entire hour, quite steady. I demolished all the ham and eggs and sausages they placed before me, with their due accompaniment of bread, and then a round of cold salt beef was brought up, from which I was helped abundantly.[25]

Finally free and livin' high on the hog!

Thousands of slaves escaped on the Underground Railroad. But it would take a war to free all four million of them.

THE CIVIL WAR—1850–1865

In April 1861, one month after Abraham Lincoln was inaugurated as president, the Confederacy fired on the United States at Fort Sumter in South Carolina, and the Civil War began. In the beginning, under the command of Robert E. Lee and other brilliant generals, the South was winning. But gradually, the North's greater population, food production,

and industrial strength—including two-thirds of the railroad tracks and all the gun factories in the country—began to overpower the South's rural cotton-based economy. Every major battle of the war except Gettysburg, in Pennsylvania, was fought in the South. Control of the food supply was crucial to the North's strategy.

Scorched Earth in the South: Grant and Sherman

The North's General Ulysses S. Grant, trained at West Point, just as the South's Robert E. Lee was, knew that a commander can move his troops only as far as he can supply them. And the lesson of Napoleon was not far in the past. Around Christmas in Mississippi in 1862, Confederate troops destroyed all of Grant's food and supplies. The Southerners, filled with "intense joy," came to Grant to gloat, but got a shock when he told them he had given orders to take all of their food for fifteen miles around. By May 1863, Grant was employing a scorched earth policy in Mississippi:

> The country was rich and full of supplies of both food and forage. [The troops were] instructed to take all of it. The cattle were to be driven in for the use of our army, and the food and forage to be consumed by our troops or destroyed by fire . . .[26]

General William Tecumseh Sherman applied the scorched earth policy in 1864 on his six-month march through the South on a front sixty miles wide. Sherman marched south from Atlanta to Savannah and the Atlantic, then north through South Carolina, North Carolina, and Virginia, doing more than $100,000,000 [estimate in 1865 values] in property damage, a great deal of it to railroads.[27] As he started his march, news reached him about the Confederate prison in Andersonville, Georgia, where Union soldiers were being held:

> Inside the camp death stalked on every hand. . . . one-third of the original enclosure was swampy—a mud of liquid filth, voidings from the thousands, seething with maggots in full activity. Through this mass of pollution passed the only water. . . . We could not get away from the stink—we ate it, drank it and slept in it.[28]

"War is all Hell," said Sherman. Southerners in Northern prison camps and in Sherman's path agreed and went one step farther: Sherman was Satan. But the slaves he freed along the way thought he was God.

Florence Nightingale: Cooking for the Troops

When the American Civil War broke out, one of the foremost authorities in the world on military nutrition and sanitation was an upper-class

Englishwoman. When England, France, and Turkey went to war against Russia in the Crimean War in 1854, British troops died in horrifying numbers—not in battle, but from disease, a greater percentage than had died in the bubonic plague epidemic in London in 1660. Florence Nightingale went to the front lines and found out why: "Let men be under-fed on salt provisions, imperfectly cooked, and without vegetables or fermented bread"[29] and they'll get scurvy, which will make them susceptible to other illnesses. Nightingale was outraged, as were many in England, because the prevention of scurvy had been known for years. There were also "neither camp kettles nor fuel to cook . . . with."[30] Nightingale and her thirty-eight nurses, against tremendous hostility from male British army doctors, set about procuring better food and clothing for the men, bathing them, and scrubbing the filthy barracks.

In 1861, as the American South prepared for war, they printed a pamphlet called *Directions for Cooking by Troops in Camp and Hospital, Prepared for the Army of Virginia, and Published by Order of the Surgeon General: with Essays on "Taking Food" and "What Food" by Florence Nightingale.* Nightingale's two essays follow recipes for "Coffee for One Hundred Men, One Pint Each," "Fresh Beef Soup for One Hundred Men," and beef soup, beef tea, thick beef tea, essence of beef, chicken broth, plain boiled rice, rice water, barley water, arrow-root water, and sweetened milk thickened with arrow-root for invalids. Nightingale's philosophy on feeding the sick was based on her observations and broke with many traditions. She observed that sick people can't take solid food early in the morning because they have feverish nights and are dehydrated and would do better with "A spoonful of beef-tea, or arrowroot and wine, of egg flip, every hour."[31] She stressed ingenuity, "thinking outside the box" we would call it now, and said "The patients [sic] stomach must be its own chemist"—the stomach was right, and the book was wrong.[32]

Nightingale also had the rare ability to see beyond her class. She had a deep respect for "laundresses, mistresses of dairy-farms, head nurses . . . women who unite a good deal of hard manual labor with the head-work necessary for arranging the day's business." Nightingale made nursing a respectable profession for the first time. The sick soldiers in the Crimea called Florence Nightingale, who was often in the hospital wards in the middle of the night, holding a kerosene lamp as she made her way from sick man to sick man, "The Lady With the Lamp."[33]

In the midst of all this death, in 1863, after pressure from women's groups and others, Lincoln declared Thanksgiving a national holiday. Many Americans were also beginning to celebrate Christmas.

The Civil War ended on April 9, 1865, when General Lee surrendered to General Grant at the courthouse in Appomattox, Virginia. Less than a week later, President Lincoln was assassinated. The country immediately plunged into deep mourning.

Holiday History

CHRISTMAS, DECEMBER 25

Christmas, as it is celebrated in the United States today, is a mixture of German, English, and American traditions. It also has remnants of pagan rituals. The Romans had an end-of-the-year festival called the Saturnalia, for which the color red had special significance, especially red hats.

In the mid-1800s, England's Queen Victoria and her husband Prince Albert were photographed in the royal palace celebrating Christmas in the German tradition of Victoria's childhood—with a Christmas tree. The pictures were printed in American magazines and the Christmas tree caught on instantly, along with other German Christmas traditions like singing "O Tannenbaum" (German for "Christmas tree"), the custom of bringing fresh greens like tree boughs into the house in the middle of winter, candy canes, and gingerbread. Plum Pudding became a British Christmas tradition. There are no plums in it; *plummy* means "something wonderful," or "choicest"; also, *plum* sometimes meant raisins. Christmas became commercialized in the nineteenth century when the new department stores used their display windows to tempt people into buying gifts. In the middle of the twentieth century, Irving Berlin wrote the song "White Christmas," sung by Bing Crosby. It became hugely popular after World War II.

In some countries, the Christmas celebration continues until January 6, the twelfth day after Christmas. Twelfth Night or The Epiphany, is when the three wise men reached the Christ child. In England, the song "The Twelve Days of Christmas" with its famous lyrics, "and a partridge in a pear tree," commemorates the observance. In New Orleans, it is the beginning of the celebration that ends with Mardi Gras. In Italy on Twelfth Night, *La Befana*, the good witch, flies in and brings gifts to children. If they are bad, they get only *carbone*—a lump of coal.

Kwanzaa is an African-American holiday that takes place between December 26 and January 1. This celebration of family and culture is a product of the 1960s Civil Rights movement; the first Kwanzaa was in 1966.

RECONSTRUCTION—1865–1877

The new president, Andrew "Tennessee" Johnson, had serious problems. Four million slaves were now free. What would they do? How and where would they live? The United States Constitution was amended quickly to grant rights to the freed people. In 1865, the Thirteenth Amendment granted freedom to all slaves; in 1868, the Fourteenth Amendment guaranteed former slaves the rights of citizens; and in 1870, the Fifteenth Amendment gave black men—but not black or white women—the right to vote.

Holiday History

JUNETEENTH, JUNE 19

Juneteenth is a special day for African-Americans. It was on June 19, 1865, that the news first reached slaves in Galveston, Texas, that they were free. There was much jubilation then and much speculation now about why they didn't find out sooner. The Civil War had been over since April, and Lincoln had issued the Emancipation Proclamation two and a half years earlier, on January 1, 1863. But then, some masters told their slaves that since Lincoln had freed them and he was dead, they were slaves again.[34]

Frederick Douglass, a famous black leader who escaped from slavery, made a speech in which he told white people that the Fourth of July was their holiday for their country. Juneteenth finally gave the freed slaves something to celebrate, which they did with barbecue and music. Ntozake Shange's book *If I Can Cook/You Know God Can* is part cookbook, part memoir, part history of Africans in the western hemisphere, and all soul. It is as if Shange is in the kitchen with you at the prep table, telling stories about the ingredients as you do your mise. The recipe for the traditional good-luck New Year's dish, Hoppin' John (Black-eyed Peas and Rice), ends with: "Yes, mostly West Indians add the coconut, but that probably only upset Charlestonians. Don't take that to heart. Cook your peas and rice to your own likin'."[35] Shange has recipes for every day and for special occasions, like Pig's Tails by Instinct, French-fried Chitlins, Cousin Eddie's Shark with Breadfruit, and Collard Greens to Bring You Money. For more on the history of Juneteenth, check out www.juneteenth.com.

The first thing many of the freed people did was try to find their family members who had been sold. This was difficult and in some cases impossible for people who didn't know where or when they were born because it was illegal for them to read. And, like serfs on feudal estates in the Middle Ages, they didn't have last names. They were only "Mammy" or "Sam." Many took the names of presidents, especially Lincoln and Washington, the two presidents who freed slaves. They went to school for the first time. Parents wanted their children to be able to read so that they could have a better life. The older people wanted to read the Bible before they died. And finally, they could get married legally. They also insisted on being addressed respectfully, as "Mr." or "Mrs." This angered whites.

The Black Codes and the Ku Klux Klan

White Southerners didn't want to lose the social, economic, and political control they had had over black people and their labor. If the freedmen could make a living and feed their families by working their own land or

hunting or fishing, they wouldn't have to work for whites. In November 1865, just seven months after the end of the war, Mississippi was the first Southern state to pass "Black Codes." These laws made it illegal for black people to hunt or fish; to own a hunting dog, a gun, or land; to preach or assemble without a license. The Codes also made "intent to steal" a crime. The punishment: black men and women who went to jail were leased out to white plantation owners as convict labor on chain gangs.[36] Whites who went to prison served their sentences in prison.

At the same time, Confederate army veterans went out at night, still wearing their gray uniforms, to terrorize and kill the freed people. They called themselves a secret circle, and used the Greek word for circle, *kuklos*—the Ku Klux Klan or KKK. When the angry Republican Congress sent the United States Army to occupy the South as if it were a foreign country, Klansmen hid behind sheets and hoods.

The Klan got control of the South after the most corrupt election in American history, the presidential election of 1876. A committee of fifteen congressmen finally decided who the president would be—three days before the inauguration in 1877. The Compromise of 1877 (think "deal") let Republicans keep the presidency, while Democrats got the troops out of the South. Northerners knew that when the army left, black people would lose their rights and their lives at the hands of the KKK. They did figuratively to the freedmen what their masters had done to them literally: sold them down the river. It remained that way until the Civil Rights Movement in the 1960s began to reverse it.

While America was fighting its Civil War, France took advantage of the situation to send troops into the western hemisphere and try to take Mexico. They failed, and Mexicans still celebrate their victory.

Holiday History

CINCO DE MAYO (MAY FIFTH)

Cinco de Mayo commemorates the day in 1862 when a small group of Mexicans defeated a much larger, better-equipped French force at Puebla and prevented them from taking the capital, Mexico City. (It is *not* when Mexico won its independence from Spain, which was September 16, 1810.) Mexico's default on a loan payment was France's excuse to invade. With aid from the United States, the French were gone by 1867. But the festival lives on in Puebla and in parts of the United States with large Mexican populations. Mariachi music, *folklórico* dancing, parades, and street fairs include traditional foods like margaritas (classic, strawberry, melon, and more), guacamole and chips, green corn tamales at the beginning of the season, and cook-offs of menudo (a stew of tripe, hominy, and chile). See www.mexonline.com/cinco.htm.

THE WEST: THE RAILROAD AND THE INDIAN WARS—1860s–1886

After the Civil War ended in 1865, Americans were free to continue moving west. Many of the freed slaves moved to Kansas and became cowboys. One, Bill Pickett, invented steer wrestling—jumping off a horse, grabbing a steer by its horns, and wrestling it to the ground, which became (and still is) a major rodeo event. One of the ways he controlled a longhorn was by "bulldogging"—biting its lower lip, which isn't done anymore. Pickett was a rodeo superstar and the first black man elected to the National Cowboy Hall of Fame.

"I've been workin' on the railroad"

To get to the Pacific Ocean, Americans needed to build a transcontinental railroad, even though the United States already had almost half of all the railroad tracks in the world. Finding workers wasn't easy; any able-bodied male in California wanted to look for gold, not work for $3 a day. Finally, Leland Stanford (as in Stanford University) had an idea: Chinese. The Chinese were already in California; they had come looking for gold but discrimination by whites had forced them out. Mark Twain visited San Francisco's Chinatown in the 1860s and wrote, the Chinese "are quiet, peaceable, tractable, free from drunkenness, and they are as industrious as the day is long. A disorderly Chinaman is rare, and a lazy one does not exist."[37] Whites said that the Chinese—on average, under four feet, ten inches tall—were too small to build a railroad. Stanford shot back, "They built the Great Wall of China, didn't they?"[38]

And like the workers on the Great Wall of China and the pyramids in ancient Egypt, the men who built the railroad had to eat, too. White workers were often sick with intestinal illnesses. Chinese weren't. Diet made the difference. Whites ate what the railroad gave them—boiled beef and potatoes—and drank water from polluted streams. The Chinese got food from Chinese merchants in San Francisco, paid for and cooked it themselves, and drank tea made from germ-free boiled water. They ate:

> Oysters, cuttlefish, . . . abalone meat, [Asian] fruits, and scores of vegetables, including bamboo sprouts, seaweed, and mushrooms. . . . rice, salted cabbage, vermicelli, bacon, and sweet crackers. Very occasionally they had fresh meat, pork being a prime favorite, along with chicken.[39]

Because they didn't get sick, the Chinese were accused of being "devilish." They also bathed daily and didn't drink alcohol. Their only vice

was that they smoked opium on Sundays—a habit acquired from the British (see Chapter *9*.)

In October 1869, the same year that the last province in India came under British control, the last spike of the transcontinental railroad—the "Golden Spike"—was driven in Ogden, Utah, and the east and west coasts of the United States were connected by rail. Food on the trains was considerably better than it had been at the stage stops where Mark Twain ate. The Chicago-based Pullman company manufactured "palace" cars, luxurious "hotels on wheels" with leather seats, brass lamps, and curtains. The dining cars were equally elegant. White linen and solid silver were on the table; Champagne, antelope steaks, mountain trout, and fresh fruit were on the plates. The contrast between the wildness of the country outside and the civilization on the train with a chef and a French-influenced menu impressed diners.[40] Also impressive was the excellent service. All the waiters and porters on the Pullman cars were black; until the middle of the twentieth century, these were some of the best jobs black men could get in the United States, and they were also one of the first labor unions for blacks.

When the transcontinental railroad was finished, the Chinese were twenty-five percent of the labor force in California. There was not another project that needed as many laborers, so desperate Chinese would work for less than whites. Angry white workers retaliated with mass lynchings of Chinese in Wyoming, San Francisco, and Los Angeles. In 1882, Congress passed the Chinese Exclusion Act to keep the Chinese, the poor, mentally retarded, and prostitutes out of the United States.

But the Indians were still a problem.

Scorched Earth in the West: Buffalo Culture and the Plains Indians

The United States Army used the same scorched earth policy on Native Americans that it had used in the Civil War: it wasn't necessary to kill the people, just destroy their food supply. The buffalo was more than just the main source of food for the Plains Indians; it was their entire culture. Buffalo hides made tepees (their homes), their clothes, blankets, robes, and moccasins (their shoes). Buffalo horns were used for ceremonial costumes, the bones became sewing needles, the ligaments and sinews were used like rope and wire. Buffalo bladders and stomachs became containers. Approximately fifty million buffalo were killed by the army and by "sportsmen" who rode the new railroads out onto the plains and used long-range repeating rifles to pick off buffalo as if they were in a shooting gallery (with free bullets provided by the army). Sometimes the entire carcass was left to rot except for the tongue, which was prized as food in the eastern United States. Sitting Bull, the chief of the Lakota, said, "A cold wind blew across the prairie

when the last buffalo fell—a death wind for my people."[41] But it opened up the land for white people.

The Family Farm Economy

The Midwestern farm economy was a household economy. Everyone participated; the work of women and children was essential. Labor was divided by gender. Because of frequent pregnancies, women stayed closer to the house, but if it became necessary, for example, at harvest time, they worked in the fields, too.

MIDWESTERN FARM FAMILY DUTIES

Women and Children	Men and Boys
All food preparation: 3 big meals a day	Chop down trees to clear land
Feed and milk cows	Chop wood for fuel
Feed chickens, gather eggs, clean henhouse	Build and mend fences
Make sausage and prepare hams	Plow and spread manure in fields
Tend domestic garden near house	Sow
Preserve fruits and vegetables	Harvest
Make cheese	Maintain and repair farm equipment
Churn butter	Care for oxen, mules, horses
Clean house	Herd and feed hogs and sheep
Spin wool and flax into yarn	Clean and maintain barnyard
Weave cloth from yarn; dye or bleach it	Slaughter and butcher large farm animals
Cut, sew, mend clothes for entire family	Hunt
Make soap	Make cider
Wash clothes, hang outside to dry	Make maple sugar
Knit socks, mittens, and caps	
Pluck down from geese and ducks, stuff pillows with it	
Make cider and maple sugar	
Bear, nurse, and take care of children	
Make everything look nice	

The Locust Plagues

In spite of the incessant hard work by everyone in the family, nature was still a huge variable. In the Bible, locusts were one of the ten great plagues the God of the Hebrews sent to force the Egyptians to let the Hebrews

go. Locust is another word for grasshopper or cricket and means "burned over place," which is what the land looks like after these insects have been there. A locust can eat as much as thirty-eight pounds in its lifetime, which is only a few months.[42] From 1873 to 1878, grasshoppers descended on Midwestern farms like a Biblical plague. Year after year, they ate everything in sight. First, the large adult grasshoppers swarmed down on the fields with a deafening noise like a million scissors and ate the ripening wheat, oats, barley, and corn. Then they laid eggs. Farmers in Minnesota were sure the tiny eggs wouldn't be able to survive the brutally cold winter or the rainy spring. They survived both and hatched just in time to eat the sprouting wheat, oats, barley, and corn. They repeated this pattern for half a decade. The farmers burned the fields, but the grasshoppers flew away and came back. They covered the crops with sheets and blankets, but the grasshoppers ate them. They invented "hopper dozers," pieces of metal smeared with molasses and dragged through the fields. Not enough grasshoppers stuck to make a difference. Laura Ingalls Wilder, who later wrote the *Little House on the Prairie* books, remembered running home from school and feeling grasshoppers crunch under her bare feet. Finally, unable to control the grasshoppers or make a living, people moved away. In the middle of one of the greatest westward migrations in history, some states *lost* population.[43]

"Don't Fence Me In": Cattle Drives, Cow Towns, and Barbed Wire

The cattle drives began after the Civil War, in 1866, when a surplus of cattle drove the price down to $1 a head in Texas while cities back East were starved for beef. There was no railroad in the South, so Texas cattlemen decided to drive their longhorns north to the railheads, to the legendary tough cow towns—Wichita, Dodge, and Abilene in Kansas; Omaha in Nebraska. These were the towns of lawmen like Wyatt Earp. The trails had names like Chisolm and Goodnight-Loving. By 1885, almost six million head of cattle were driven north to the railheads, and cheap Texas longhorn beef had replaced European breeds.[44]

Each cattle drive had a cook who managed the "chuck" wagon and dished out "grub." After the foreman, the cook was the most important man in the outfit. Other cowboys packed his bedroll and harnessed his team. And they'd better stay out of his way. Cooks were notoriously temperamental. After all, they were cooking for sometimes 100 men, outside, in a different place every day, from the back of a wagon. The cooks spent much time alone, because they had to ride on ahead of the outfit and cook so the food was ready at the end of the day. The pots, Dutch ovens, and frying pans were heavy cast iron. The fare was coffee, beans, coffee, beef, coffee, biscuits, and coffee; nothing raw and green like vegetables, although canned peaches were a favorite, and canned



Chuck wagon. *Courtesy Security Pacific Collection/Los Angeles Public Library*

tomatoes provided enough vitamin C to keep scurvy away.[45] Chile was the main spice. With the coffee was the equally essential granulated brown sugar, so dried out that chunks had to be chipped off and then put through a meat grinder. A coffee grinder was on the side of every chuck wagon, too, and coffee in hundred-pound sacks. Sometimes they killed one of the cows and made "Son of a Bitch Stew."

The introduction of barbed wire at the De Kalb, Illinois, County Fair in 1873 began the closing of the open range. As farmers used the new wire to build fences wars erupted with cattlemen over who could use the land and in what way. Weather also played a part. In Texas and on the Great Plains, 1886 was the end of the cattle drives. In the blizzards of 1886–1887, the cattle, blinded by snow, instinctively headed south. When the snow cleared, thousands of cattle were found frozen in the fences. It was "The Big Die-Up."

1886 was also the end of the Indian wars—every Indian who had been at war with the United States was dead, in jail, or on a reservation. The last Indian to surrender was Geronimo, son of Cochise and leader of the Chiricahua Apache; he surrendered in Skeleton Canyon in southeastern Arizona, not far from Tombstone. In 1887, Congress passed the Dawes Severalty Act to break up tribal lands and force Indians to dress, speak, worship, and live like Americans.

Unions

Also in 1886, a bombing in Chicago's Haymarket Square killed seven policemen. The Knights of Labor, the major union at that time, was blamed. Membership dropped so drastically that it went out of existence. A new union, the American Federation of Labor (AFL), which still exists today, began later in 1886. Some of the first to join were restaurant workers.

EARLY HOTEL AND RESTAURANT EMPLOYEES UNIONS IN THE AFL[46]

Date Formed	Location	Organization
1887	New York	Waiters Union
	New York	Bartenders
1888	Brooklyn	Bartenders
	Boston	Bartenders
	St. Louis	German Waiters Union
1890	St. Louis	American Waiters and Bartenders
	St. Paul	Waiters Union
	Chicago	Waiters League (founded 1866 under the Knights of Labor)
	Brooklyn	Waiters Union
1891	Indianapolis	Waiters
	Minneapolis	Waiters
	Denver	Cooks
	St. Louis	Cooks
	Logansport, IN	Bartenders Mutual Aid

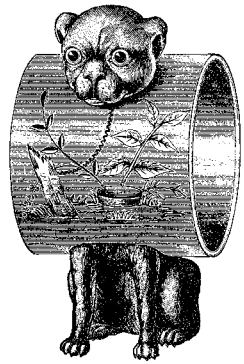
THE GILDED AGE

In the last quarter of nineteenth-century America, everything seemed covered in gold. It was the Gilded Age, after the title of a novel written in 1873 by Mark Twain and Charles Dudley Warner. The Industrial Revolution and America's abundant natural resources were making Americans wealthy and they were showing it off. The word *millionaire* didn't exist before the 1840s; by 1901, America had its first billion-dollar corporation, United States Steel. The wealthy built mansions that rivaled European palaces and often included pieces of real ones that had been dismantled, shipped across the Atlantic, and reassembled. Flatware

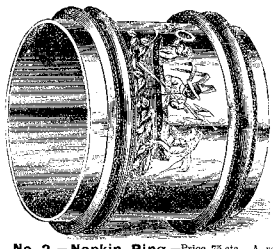
VALUABLE ARTICLES FOR THE HOUSEHOLD.

SILVER-PLATED WARE.

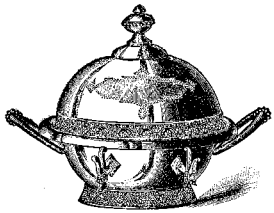
LATEST [1884] PATTERNS.



No. 1.—Cat or Dog Napkin Ring.—Price $1.50.—A novel and amusing design for a Napkin Ring, being the head and limbs of a solemn little Pug-dog, with the ring in place of his body. Prettily chased and ornamented. Another ring has the head and limbs of a demure-faced Cat instead of those of a dog. These rings are especially acceptable to children, and either one of them will be **Presented** for **2** subscriptions at $1.50 each; OR, supplied for $1.50. Post-paid in either case.



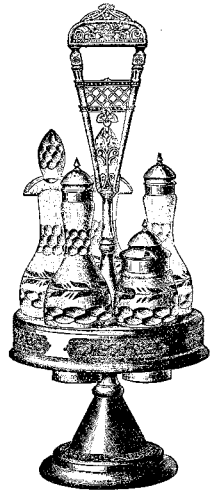
No. 2.—Napkin Ring.—Price 75 cts.—A remarkably fine Ring for the price, being one and three-quarter inches wide, and of the best quadruple plate. The chasing is very elegant, and of a new design, a spirited hunting scene. This ring will be **Presented** for **1** subscription at $1.50; OR, supplied for price. Post-paid in either case.



No. 3.—Butter Dish.—Price $5.50.—An excellent article in every respect, prettily chased and ornamented. Provided with a perforated drainer for the melting ice, a dome-shaped cover bearing a shield, on which an initial or monogram can be engraved, and a pair of rests for the butter knife. This last will be found a great convenience in saving the table linen from greasy spots. **Presented** for **6** subscriptions at $1.50 each; OR, supplied for price. Recipient to pay small expressage in either case. (See below.)

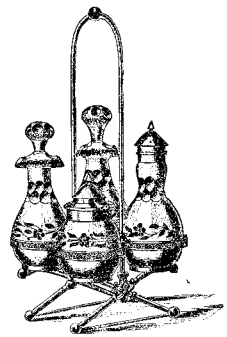


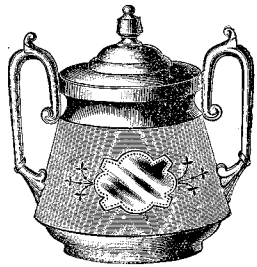
No. 4.—Fruit Dish.—Price $9.00.—A very elaborate center-piece for a dinner table, consisting of an ornamental glass dish, supported by a massive stand of best quadruple silver plate. A charming little figure in Kate Greenaway costume, and surrounded by cupids and a wreath of roses, peeps out from beneath the stand. This dish would be a handsome present for a friend. Stands nine inches high, and when filled with large fruit is very imposing and elegant. **Presented** for **10** subscriptions at $1.50 each; OR, supplied for price. Receiver to pay small expressage. (See below.)



No. 5.—Dinner Caster.—Price $7.00.—This handsome Caster will give an air of elegance to the dinner table. It is of best quadruple plate, elaborately chased in flower and butterfly pattern shown in the engraving, and contains five shapely glass bottles, three of them with silver stoppers. It has the "Patent Non-friction Bearing," by means of which it revolves smoothly, producing no jarring of the bottles, nor noise. **Presented** for **7** subscriptions at $1.50 each; OR, supplied for price. Receiver to pay small expressage.

No. 6.—Breakfast Caster.—Price $6.00.—Simple but elegant design. Each of the four cut-glass bottles rests in a silver cup, and is encircled by a wreath-pattern; two of the cruets have silver tops, and two, cut-glass stoppers. This caster is of the best plate, is easily cleaned, and of the most appropriate size for the breakfast table. **Presented** for **6** subscriptions at $1.50 each; OR, supplied for price. Small express charges to be paid by receiver. (See below.)





No. 7.—Sugar Basin.—Price $6.00.—This Sugar Basin has the satin finish, which is superior to others in not scratching easily. It is of a substantial looking shape, with a cover and an ornamental shield for the owner's name or monogram. It will be **Presented** for **6** subscriptions at $1.50 each; OR, supplied for the price. Receiver to pay small expressage.



No. 8.—Cream Jug.—Price $5.50.—This Jug is of the same workmanship and design as the preceding sugar basin, and the two together will make a pretty pair, though either one alone will be both ornamental and serviceable on a tea table. The Jug will be **Presented** for **6** subscriptions at $1.50 each; OR, supplied for price. Expressage to be paid by the receiver.

Drop us a Postal Card to Learn the Exact Freight or Expressage to Your Place on any Premium.

Silver-plated ware. *From the American Agriculturist catalog, October 1884.*

was gold; dishes were trimmed in gold; ballroom and drawing room ceilings and walls were covered with gold leaf, gold paint, gold draperies. For the less wealthy, there was still silver.

Shopping and Eating

Galloping consumerism characterized the Gilded Age. Factories produced massive amounts of goods and advertised to get people to buy them. Two new technologies helped Americans to become good shoppers: structural steel and plate glass. The new structural steel was much stronger than the old wrought iron, so less of it was needed to support a building. Like the Gothic cathedrals of the Middle Ages, there was now more space between beams. Into this space went plate glass windows—one huge piece, six feet high or more. Behind these windows, goods were displayed: the department store was born. At the end of the nineteenth century, when Otis invented the elevator, the skyscraper was born. Going shopping was one of the only excuses a respectable middle-class woman had for leaving the house.

If the shopper couldn't get to the department store, the department store came to the shopper. Catalogs hundreds of pages long from Sears Roebuck & Co. headquarters in Chicago tempted farm families with pictures of stoves, dishes, pots and pans, farm tools, seeds, tractors, hot-water heaters, rugs, shoes, ready-made clothes, furniture. All of it could be ordered by mail and delivered by train—even the house to put it in.

Houses were beginning to have indoor plumbing and electricity, and more than one room for eating. The dining room was formal, while there might be a separate, less formal breakfast room for just the family. Middle- and upper-class meals were breakfast, dinner, and supper. There were other meals for women: the "ladies' luncheon" and high tea.

Tin cans and refrigerated railroad cars made this increase in the standard of living possible. Tin cans—Appert's invention, mass produced on American assembly lines by 1876—made previously exotic, out-of-season, or extremely perishable foods affordable and convenient. Canning began in America in the 1820s with lobsters, oysters, and salmon. By 1882, tomatoes, corn, beans, and peas were the most popular canned foods of the at least fifty-one kinds available.[47] Refrigerated railroad cars made meat, especially beef and pork coming out of the world's largest meat market, the Union Stockyards in Chicago, available throughout the country. In the North, especially, people went to restaurants.

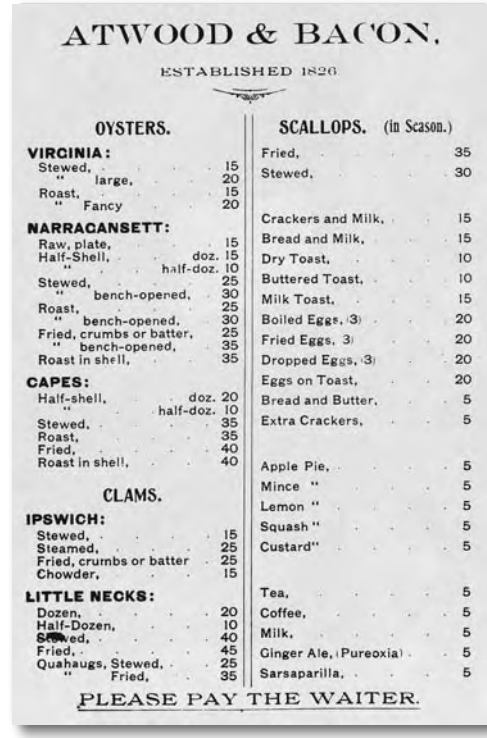
American Restaurants

The Union Oyster House in Boston, Massachusetts, claims to be the oldest continuously operating restaurant in the United States. The building dates back to before 1742 and became the Atwood & Bacon restaurant in 1826. Located in the North End, it is near the wharves and where

Paul Revere lived (his house is still standing), and the historic Quincy Market Area (now the Boston Market). The fare was simple.

Oysters were a craze in the nineteenth century, selling for fifteen or twenty cents a dozen. Oyster houses and bars sprang up all over the U.S. In the middle of the country, with no ocean, there were "Prairie Oysters"—raw eggs replaced raw oysters, which had a similar consistency. The condiments were the same: Tabasco, Worcestershire, lemon, vinegar, and ketchup. Farther west, Prairie Oysters, also called Rocky Mountain Oysters, were neither oysters nor eggs, but calf's testicles.

Boston boasts another "continuously"—the Parker House, in the center of town, is the oldest continuously operating hotel in the United States. It was there that Parker House rolls were invented. They claim Boston cream pie—really a layer cake with a custard filling and chocolate frosting—but this can't be proven.



ATWOOD & BACON.

ESTABLISHED 1826.

OYSTERS.

VIRGINIA:
Stewed, 15
" large, 20
Roast, 15
" Fancy 20

NARRAGANSETT:
Raw, plate, 15
Half-Shell, doz. 15
" half-doz. 10
Stewed, 25
" bench-opened, 30
Roast, 25
" bench-opened, 30
Fried, crumbs or batter, 25
" bench-opened, 35
Roast in shell, 35

CAPES:
Half-shell, doz. 20
" half-doz. 10
Stewed, 35
Roast, 35
Fried, 40
Roast in shell, 40

CLAMS.

IPSWICH:
Stewed, 15
Steamed, 25
Fried, crumbs or batter 25
Chowder, 15

LITTLE NECKS:
Dozen, 20
Half-Dozen, 10
Stewed, 40
Fried, 45
Quahaugs, Stewed, 25
" Fried, 35

SCALLOPS. (in Season.)
Fried, 35
Stewed, 30

Crackers and Milk, 15
Bread and Milk, 15
Dry Toast, 10
Buttered Toast, 10
Milk Toast, 15
Boiled Eggs, (3) 20
Fried Eggs, (3) 20
Dropped Eggs, (3) 20
Eggs on Toast, 20
Bread and Butter, 5
Extra Crackers, 5

Apple Pie, 5
Mince " 5
Lemon " 5
Squash " 5
Custard" 5

Tea, 5
Coffee, 5
Milk, 5
Ginger Ale, (Pureoxia) 5
Sarsaparilla, 5

PLEASE PAY THE WAITER.

Atwood & Bacon restaurant menu, 1826. *Courtesy the Union Oyster House*

In New York, Swiss immigrant brothers opened Delmonico's Restaurant at No. 2, South William Street, in 1831. They served Continental cuisine. The restaurant became more than just *the* place to eat for Wall Street financiers. It also served at various times as a telegraph office and a bank. In 1832, President Jackson vetoed the recharter of the Bank of

Holiday History

TESTICLE FESTIVALS

Prairie Oyster festivals are still held today in the West. Several Montana towns hold festivals in September. They have also been held in Virginia City, Nevada, and in Nebraska. Prairie Oysters are also called "Montana tendergroin, bulls jewels, and cowboy caviar." Beer is not in short supply at these events.



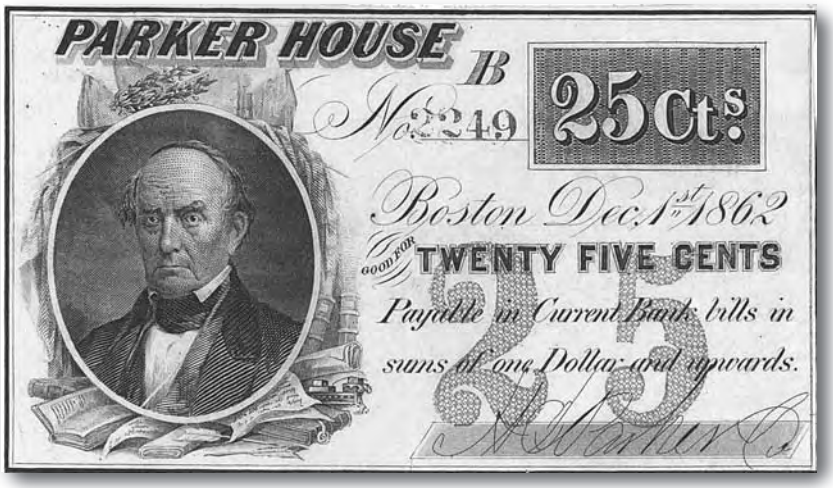
Exterior, Atwood & Bacon restaurant. *Courtesy the Union Oyster House*

the United States. After 1837, without one central bank in control, any institution with enough credibility to back up its name could issue its own money. Delmonico's and the Parker House did.

Other nineteenth-century restaurants were the Pump Room in Chicago, and Antoine's (1840) in New Orleans. Most travelers stayed at hotels, on the "American Plan"—you paid for room and meals, whether you ate there or not, a prix fixe situation. As more European travelers came to the U.S., they objected, so hotels switched to the "European Plan"—you paid for your room and only for the meals you ate, like à la carte.[48]



Delmonico money. *Courtesy of the Federal Reserve Bank of San Francisco, American Currency Exhibit*



Parker House money. *Courtesy of the Federal Reserve Bank of San Francisco, American Currency Exhibit*

Botulism

Modern methods of preservation contributed to some lethal food-borne illnesses (FBI's). One of these is botulism *(Clostridium botulinum)*. Just as yeast is present in the air, botulism is present in the soil. Because it lives deprived of oxygen, it is a class of organisms called anaerobes (Greek *an* = no, *aero* = air). Enough acid will kill it. When foods, especially vegetables, were preserved by pickling, the vinegar destroyed the botulism. But with the Industrial Revolution and the advent of vacuum-packed canning, botulism ran rampant. It is a disease that strikes the

nervous system, paralyzing the muscles. Death usually comes—very painfully—from the inability to breathe because of paralysis of the diaphragm. Not dying is no guarantee of recovery; blindness and paralysis can remain. To make things worse, unlike other FBI's, botulism can be in food and present no signs: no bulging can, no nose-holding stench, no slime.

Eating Disorders: Anorexia and Bulimia

In Victorian England and America, an appetite for food was equated with an appetite for sex, which was taboo. The foods that were thought to arouse unhealthy appetites in girls and women were coffee, tea, chocolate, mustard, vinegar and pickles, spices, nuts, raisins, warm bread, pastry, candy, and alcohol. Meat was the worst—it would surely lead to insanity or nymphomania or both.[49] A woman seen eating meat and potatoes put herself on a level with a barnyard animal. Many women took to eating in secret—reversing the trend for women to eat in public that was begun by Catherine de Medici almost 400 years earlier. Men's animalistic sexual impulses needed to be controlled, too. Piano legs were covered so men's wicked thoughts would not be stimulated by the sight of a leg—any leg. A glimpse of a lady's leg was nearly impossible because her ankle-length skirt and petticoats would have to ride above her knee-length high-button shoes—and even then she was wearing stockings you couldn't see through. These sexual avoidances carried over into the language of food. Polite people offered their guests "white meat" or "dark meat" because one simply did not utter the words *breast* or *leg*.

In this world of rigid control of women and sexuality, manners and food, a strange malady began to appear, mostly in middle- and upper-class teenage girls. In a time of an abundance of food and wealth, these girls wasted away and sometimes died because they would not eat. The disease was first described in 1868 by an English physician who named it anorexia nervosa.[50] It experienced an upsurge in the 1960s.

There are two main forms of the disease. Anorexia involves starving. Bulimia is binge eating, then purging the food out of the body by extreme exercise, laxatives, enemas, vomiting—at first, forced by putting the fingers down the throat; later, at will. Both are characterized by being more than fifteen percent below *minimal* normal body weight, missing three consecutive menstrual periods, and abnormal preoccupation with appearance. The numbers on the scale tell these young women that they are seriously underweight but when they look in the mirror all they see is fat. These diseases are ten times more common in women than in men, especially now in professions like modeling and ballet, although male wrestlers, for example, who have to stay within strict weight categories, also abuse food. Malnutrition unbalances metabolism and depletes vitamins and minerals. Loss of body fat causes the person to feel cold all

the time so the body grows fuzz all over—like fur—to try to warm itself. Calluses develop on the back of the hands from sticking fingers down the throat; acid in vomit erodes teeth and esophagus; blood pressure drops because the heart slows down. About eleven percent die.[51]

Good Help Is Hard to Find

In the late-nineteenth-century United States, keeping homes clean and preparing meals required a great deal of work. In the country, someone had to go outside, pump water out of the well, and bring it back into the house, one bucket at a time. In cities, barrels of water had to be lugged upstairs. Getting human and household waste out of houses and apartments in cities was easier—open a window and let gravity take over. Animal garbage collectors—pigs—roamed the streets. By the 1880s, cities began building sewage systems, but they were storm sewers, not sanitary.[52] Houses were lit by kerosene after oil was discovered in Titusville, Pennsylvania, in 1859. It was a dirty fuel, leaving black soot on lamp, walls, fabrics (and lungs), and it required cleaning, too. Who would do all this work?

Middle-class women were unhappy with their servants. The "servant problem" as it was called, was really this: women who had a choice went to work in factories. They wanted to earn and keep their own money. They didn't want to work six-and-a-half days a week in somebody else's house, have their mail opened and their lives monitored. In America, there was not a class of people raised to be servants as there was in Europe. Immigration, disrupted by the Civil War, resumed with a flood of immigrants at the end of the nineteenth century. But people don't come to America so they can be servants for the rest of their lives.

In contrast to the wealthy young women who starved themselves, working-class young women who smoked, drank, and kept "bad company" with people their parents didn't like were sent to prison, sometimes for years. Often these young women felt that because they were earning their own money, no one could tell them what to do. Their offense was that they were behaving like men. In New York, they were sent to the women's reformatory north of New York City at Bedford Hills. From there, they were paroled as household and kitchen help to middle-class women who were having trouble finding servants. It was an ideal situation for the housewives: if their "girl" didn't do what they wanted, they had the entire prison system and the police force to discipline her.[53]

Vassar—The First College for Women

Also up the Hudson River, seventy-two miles north of New York City, in Poughkeepsie, was a different kind of institution for women. In the

1860s, a British immigrant, brewer Matthew Vassar, wanted to do something to make himself famous. So he funded a college that he declared would be for women what Harvard and Yale were for men. He did this in the face of the best (male) medical advice at the time, that if women used their brains they would damage their reproductive organs. Menus from shortly after the college's founding reveal typical nineteenth-century American institutional food, heavy on meat and starches. They also clearly fit the nineteenth-century trend to have a substantial breakfast—one weekday's offerings are Boston brown bread, fish hash, beef steak, and fish eggs. The main meal was midday—roast beef, corned beef, hominy, bread pudding, and mackerel (in that order on the menu). Supper was light—sometimes only prunes or biscuits and applesauce.

For about a century, these meals were cooked in individual dormitory kitchens and served in wood-paneled dining rooms on tables covered with white cloths, under chandeliers. The young women had to dress up for dinner, which until the late 1960s meant wearing skirts. But breakfast and the midday meal were more informal. This atmosphere created a sense of family among the students, who often referred to each other as "sister."

However, in the last decades of the twentieth century, it became too expensive to have a dining room in every dormitory, so one central dining hall was created. By then, the college had also become coeducational. Women attending Vassar and the other colleges that opened to them in the late nineteenth and early twentieth centuries would have a profound impact on America and the world in the coming generations.

They also had a profound influence on chocolate. The first written reference to fudge making comes from Vassar in 1887.[54] The craze spread to other women's colleges, especially Smith and Wellesley in Massachusetts. The Vassar recipe is a simple, basic one of cream, sugar, butter, and chocolate. Smith added brown sugar; Wellesley contributed marshmallow creme. Ninety percent of the recipes for fudge in the U.S. today are based on these three recipes.[55] As chocolate became more popular, it became associated with one very romantic holiday that began to be celebrated in the nineteenth century, Valentine's Day.

The First Cookbooks by African-Americans

The first cookbook by an African-American was written in 1866, the year after the Civil War ended. There is only one copy in existence, at the Longone Center at the University of Michigan. A cookbook called *What Mrs. Fisher Knows About Old Southern Cooking,* was published in San Francisco in 1881, but it was not until the 1990s that food historian Dan Strehl discovered that the author, Mrs. (Abby) Fisher, was a mulatto, born a slave in South Carolina to a slave mother and a French father.

Holiday History

VALENTINE'S DAY, FEBRUARY 14

Valentine's Day is the second most popular day for dining out (after Mother's Day) and for sending greeting cards (after Christmas). It has its own cuisine and rituals based on a combination of Greek, Roman, and Christian cultures. In the Roman Empire, February 14 was a fertility festival, but around the year 498, Pope Gelasius declared it St. Valentine's Day. There are multiple candidates for St. Valentine, all Christian martyrs: Valentine performed secret marriages for young lovers. Or he helped Christians escape from prison. Or he was in prison and sent a love letter signed, "From your Valentine."[56]

Cupid, the chubby little winged cherub who shoots arrows into the hearts of unsuspecting humans, was originally the ancient Greek god of love, a physically perfect, gorgeous athlete. (In Rome his name was Eros, which gives us *erotic*.) His mother—Aphrodite in Greece, Venus in Rome—was jealous of a beautiful young woman named Psyche (Soul), so she sent Cupid to make Psyche fall in love with an ugly guy. But Cupid took one look at Psyche and fell in love with her himself. He made her promise never to look at him or they would be separated forever. Psyche loved him blindly, but her sisters kept pushing her to sneak a peek. One night, Psyche got a lamp and looked at Cupid while he was asleep. Her hand trembled with happiness, spilling hot oil on Cupid's shoulder. Burned physically and emotionally, he left, because "Love can't live without trust."

Brokenhearted, Psyche went to Aphrodite and begged to see him (he was there recuperating). Aphrodite tried to get rid of Psyche by giving her impossible tasks. But Psyche completed all of them, even going through hell—literally—because she loved Cupid so much. Cupid recovered and he wanted her, too. Zeus, king of the gods, gave Psyche some ambrosia—the food of the gods—which made her one of them. He declared that Cupid and Psyche were married forever, because Love and the Soul can't live without each other.[57]

During the Middle Ages, St. Valentine and Cupid mingled and Valentine became the patron saint of lovers. Cards were exchanged. The oldest valentine in existence was written in 1415. In the 1840s, an American woman, Esther A. Howland, is credited with the first mass-produced valentines. Now, in addition to cards, lovers send flowers, especially roses, and especially red roses to symbolize passion.

Valentine's Day cuisine is aphrodisiacs: Champagne, caviar, oysters, foie gras, passion fruit, and truffles (fungus and chocolate). Restaurant decor goes pink and red: menus, linens, flowers, aprons. So does the food; raspberries in vinaigrette, coulis, gelée, soufflé. Food is also heart-shaped: pâté, ravioli, cakes, tarts, muffins, pancakes, cookies, candies. But these offerings aren't guarantees—Cupid is still very mischievous.

She was illiterate, so the book was dictated. There are 160 numbered recipes in seventy-two pages. The majority—fifty-eight—are for breads, cakes, pies, puddings, and sherbets. Forty-one are for Mrs. Fisher's prize-winning pickles, sauces, and preserves. Her pastry is rolled out "to the thickness of an egg-shell for the top of the fruit, and that for the bottom of fruit must be thin as paper."[58] "Compound Tomato Sauce" is more like a ketchup, left to stand for twenty-four hours with onions, allspice, cloves, black and cayenne pepper, then cooked with vinegar.[59] South Carolina was rice country, so rice appears in one of the earliest recipes for jambalaya. Chicken, crab, oysters, and fish are mixed with crackers and turned into croquettes, baked into pies, broiled, fricasseed, stewed with rice in gumbo, or made into chowder. Potatoes are "Irish potatoes." Corn appears in fritters, boiled, in "Circuit Hash" (succotash), in hoe cake, pudding, and in corn bread with rice. Eggplant, introduced to Africa by the Arabs, is stuffed, as are tomatoes. Tomatoes *and* milk are used in clam chowder.

World's Fairs and Amusement Parks—The "All Electric Home"

On September 4, 1882, at 3:00 p.m., an event occurred which changed the world: a switch was thrown, and New York City lit up with Thomas Edison's new invention—electric lights.[60] It transformed night into day. Broadway became "The Great White Way," and New York became famous for its nightlife. Electricity and machines were used for play, too, in New York's playground, Coney Island. After 1884, people out to enjoy themselves could get on the gravity-powered ride that became the roller coaster. They could eat a "Coney Island Red Hot" before it was called a hot dog. At Nathan's Famous, they could feast on huge clams on the half-shell. They could stroll while eating cotton candy, a spun sugar confection invented by German immigrants.

Eleven years after New York was illuminated, electricity lit up a building in Chicago. The 1893 World's Fair in Chicago was called the Columbian Exposition, in honor of the 400th anniversary of Columbus's discovery of the New World. (They were a year late because it took longer than expected to arrange it.) Its intention was to do for America what the Crystal Palace Exhibition in London had done for England in 1851—show off the wealth and power of Chicago and the country. Pavilions and exhibits at the Columbian Exposition had to adhere to strict architectural guidelines to create a giant "White City"—so white that black Americans, even famous ex-slaves like Frederick Douglass, were not allowed in as either workers or spectators. They were, however, exhibits. One was a cook, an ex-slave named Nancy Green, dressed up as a slave, smiling and serving pancakes—Aunt Jemima.

Another exhibit was about electricity. It showcased the "All Electric Home" of the future, a paradise of "electric stoves, hot plates, washing and

ironing machines, dishwashers, carpet sweepers, electric doorbells, phonographs, fire alarms, and innumerable lighting devices"[61]—all of which eventually did come into widespread use, but more than fifty years later.

Holiday History

COLUMBUS DAY, OCTOBER 12

The Columbian Exposition in Chicago in 1893 began the celebration of Columbus Day in the United States. It is still celebrated with business closings and parades in cities with large Italian populations. Another public relations ploy was the Pledge of Allegiance, which was written for this fair, although the words "under God" weren't inserted until the 1950s, as a reaction to Communism. Like Thanksgiving, Columbus Day is a day of mourning for Native Americans.

NINETEENTH-CENTURY HEALTH FOOD MOVEMENTS

In 1857, German physicist Rudolf J. E. Clausius discovered a unit of heat that he called a "calorie." It was the amount of energy required to raise the temperature of one gram of water one degree Celsius. With the discovery of the calorie, could health food and dieting be far behind?

Vegetarianism

There were two phases to nineteenth-century vegetarianism. The first was pre–Civil War and began in the 1830s. The second was in the Gilded Age. One idea behind health food in the nineteenth century was that if men stopped eating like animals—meat—they would stop behaving like animals. This objectionable animal behavior included selfishness, sex, and war. In the 1830s, Dr. Sylvester Graham objected to the refined white flour that was the sign of upper-class food. He claimed that refining was a sign of man's fall from his wholesome natural state to an artificial, civilized one. He advocated healthy flour made from coarse ground whole wheat, the rough kind fed to the peasants in the Middle Ages. And he claimed that no commercial baker could make real bread. That could be done by only one person: "It is the wife, the mother only—she who loves her husband and her children as woman ought to love."[62] The flour was named after him first, then the crackers made from it. Today, it is almost impossible to find just "Graham Crackers." They are marketed as

"Low-Fat Grahams" to differentiate them from Honey Grahams, Cinnamon Grahams, Teddy Grahams, Cheddy Grahams, and the other Grahams that mock their inventor's intentions. Often, Graham flour is the third or fourth ingredient, after fat and sweeteners. Boxes suggest dipping Graham crackers into frosting or Cool Whip.

One person who carried health and self-sufficiency to an extreme was philosopher Henry David Thoreau. From July 4, 1845, to September 6, 1847, he engaged in an experiment to prove that man didn't need meat or civilization. Thoreau lived simply in the woods at Walden Pond in Massachusetts, and recorded his observations about the meaning of life, the Industrial Revolution, and detailed what he ate, how he prepared it, and how much it cost. Thoreau believed in vegetarianism, which most Americans did not:

> One farmer says to me, "You cannot live on vegetable food solely, for it furnishes nothing to make bones with"; . . . walking all the while he talks behind his oxen, which, with vegetable-made bones, jerk him and his lumbering plough along.[63]

Thoreau lived on food he purchased, picked, or planted. He bought rice, molasses, rye and corn meal, flour, a bit of salt pork or lard, and sugar. He supplemented these foods seasonally with wild fruits and nuts like grapes, wild apples, chestnuts, and ground-nuts *(Apios tuberosa)*. He also cultivated enough beans, potatoes, and peas that he was able to sell his surplus for a profit. Thoreau's total food cost per week: twenty-seven cents.[64] He proved that it could be done, but being alone almost all the time is not for everyone.

Kellogg versus Post: The Battle for Breakfast

There was a battle going on in Battle Creek, Michigan, between the Kellogg brothers. John Harvey wanted to keep the cereal they made sugar-free. W. K. wanted to add sugar. They were both blindsided by C. W. Post, who didn't have a brother to argue with. Post wanted to add sugar to the cereal he made, so he did. W. K. finally added malt sweetener to Corn Flakes. John Harvey went his own way, establishing the Battle Creek Sanitarium—the "San"—which became the center of the late-nineteenth-century health food movement and the forerunner of modern spas. By 1888, its staff of doctors, nurses, physical therapists, and dietitians was handling 600 to 700 patients at a time. Vegetarian, it catered to upper-class patrons like Eleanor Roosevelt (later First Lady) and Henry Ford. Dr. Kellogg emphasized the importance of chewing food. Another nineteenth-century health food doctor, Salisbury, was obsessed with chewing, too. He invented a patty of pre-chopped meat

formed into the shape of an oval for those who couldn't or wouldn't chew properly. It was named after him: Salisbury steak. Dr. Kellogg wrote a song about chewing. (Although the original song is gone, it was re-created for the 1994 movie about the San, *The Road to Wellville*.) He was terrified of constipation because he believed it caused "autointoxication"—self-poisoning. Absolutely convinced that masturbation was one of the greatest sins, he advised parents to raid their children's bedrooms at night to catch them in the act. He also advocated what is now called "female circumcision"—cutting the female genitals to prevent sexual enjoyment. He said this should be done without anesthetic.

Kellogg wrote many treatises on diet and food. Aided and abetted by his wife Ella, he came up with the idea that pasta should be boiled for an hour. He ignored humans' flesh-tearing teeth and claimed that all animals were originally nut eaters. Many of his recipes were based on nut butters, especially peanut butter, which Kellogg learned about from George Washington Carver, an agricultural genius.

Carver was born a slave. Booker T. Washington, head of the famous Tuskegee Institute in Alabama and also born a slave, asked Carver to be head of the Agriculture Department. Carver accepted, and stayed for forty-six years.[65] Carver saved the economy of Alabama, which had been destroyed by boll weevils, insects that kill cotton. Carver suggested that the farmers grow peanuts instead. The peanuts stored well and could be used for food, even in winter. They could be pressed for oil, and they could be fed—peanuts and leaves—to livestock.[66]

Kellogg promoted peanut butter at the San. This food, originally associated with slaves and African-Americans, was looked down on by middle-class Americans. But the upper-class people who went to the San didn't have to worry about status. They accepted Kellogg's claim that peanut butter was healthy, and spread the word. Anti-vegetarians argued with Kellogg that eating meat must have been the right thing because the human race survived, and along the way invented cooking to make meat digestible. But Kellogg's goal was "to rescue civilization from the 'race-destroying effects of universal constipation and world-wide autointoxication [self-poisoning].' "[67]

"Atlanta Holy Water"—Coca-Cola

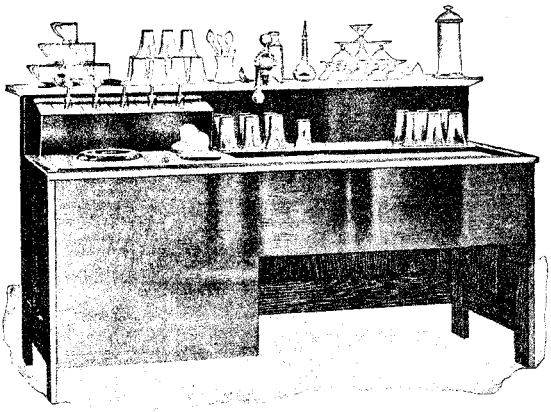
Just as apothecaries in the Middle Ages sold sugar and drugs, pharmacists in the Gilded Age sold sugar-water beverages in their drug stores. The drugstore soda fountain, a long counter like a bar where patrons are served non-alcoholic beverages, is an American invention. So is the soda jerk, so called because he jerks down on the handle of a machine that mixes soda—artificially carbonated water (invented in 1767)—and flavorings into hundreds of combinations. By the 1880s, several of these

SODA FOUNTAINS AND SUPPLIES

Prepare for the Summer season **now**—put in one of the late model fountains and complete outfits shown on this page. The best of materials and workmanship make our soda fountains reliable in every way. Fountains are equipped with the newest sanitary, labor and time saving improvements. A fountain will soon pay for itself and is a fine investment. **We ship promptly.**

New "Missouri" 6½ FT. GUARANTEED ICELESS SANITARY SODA FOUNTAINS New "Illinois"

GOLDEN OAK FINISH



Showing back view of new "Illinois." New "Missouri" same style except equipped with 6 bottles instead of 5 pumps.

GOLDEN OAK FINISH

WE BUY and sell large numbers of soda fountains and outfits, thereby keeping our cost, and consequently the selling price to you, at the lowest possible level. Our profit on each sale is small—we depend upon volume, as in all other dpartments, to carry us through. The fact that we sell through "Our Drummer" instead of the usual costly roundabout way also helps to keep the price down. No mechanic or expert needed to set up and operate these fountains, which are very simple in principle and construction. Golden Oak and Birch Mahogany finishes.

COUNTER—6 ft. 6 in. long, 2 ft. 6 in. wide, 42 in. high. Panel design, made of kiln dried oak with solid and three ply veneer panels in front and end, finished in dark golden oak.

WHITE MARBLE SLAB—6 ft. 6 in. long, 8 in. wide, and ⅜ in. thick. Crated separately.

INTERIOR—Made of cypress, the best wood for this purpose. Finished in golden oak or birch mahogany to match exterior finish.

EQUIPMENT—2 porcelain crushed fruit jars with sanitary glass covers; 1 silver plated double stream draft arm with onyx ball handle, latest model which leaves the entire counter clear; 1 soda cooler, block tin lined, 2½x16 in. with air vent and connection pipes to draft arm and soda tank, 48 in. leader pipe to tank.

DRAIN BOARD—Best zinc, corrugated by hand. Galvanized iron sink 13 in. x18 in., with inlet, outlet and overflow connections.

INSULATION—The highest quality of pure compared cork board 2 in. thick, most efficient insulation manufactured and the same as that used on the most expensive of soda fountains. Heavy galvanized iron lining, double seamed and soldered at all the joints.

COMPARTMENTS—2 compartments, 1 for a 5 gal. ice cream packer, the other for the soda water cooler with space for storage purposes and 2 glass crushed fruit containers.

The New 5 Pump "Illinois"—Complete with 5 silver plated syrup pumps and other labor saving devices. Note the sanitary design. It allows no impurities to collect. An up-to-date fountain at a reasonable price. Crated, about 500 lbs.

1C6000—Golden oak finish,
1C6001—Birch mahogany finish. Each, **$140.00**

ACCESSORY SODA FOUNTAIN OUTFIT

Partly illustrated in cut of fountain shown above

For those customers wishing to obtain accessories necessary to operate a fountain we recommend the following list:

1C6049—Contains everything necessary (except drum of gas) and nothing unnecessary. With this outfit in conjunction with any one of our fountains, one is able to serve soda 1 hour after arrival of shipment.

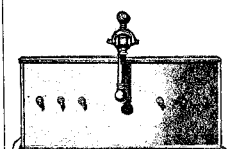
1 only 10 gal. Soda Tank.
1 " Charging Outfit (gauge, regulator hose, wrench, rocker, wall bracket, washers and connections).
6 gal. Concentrated Syrup (chocolate, vanilla, strawberry, lemon, pineapple and orange).
2 only ½ gal. jar Crushed Fruit (pineapple and strawberry).
1 pt. Phosphoric Acid.
1 doz. 5 in. Spoons.
1 " 8 in. Spoons.
½ " Silver Plated Soda Holders.
1 doz. 8 oz. Bell Tumblers.
1 " 12 oz. Bell Tumblers.
1 " Coca-Cola or Phosphate Glasses.
1 " Footed Sherbets.
2 only Crushed Fruit Bowls.
1 " Spoon Holder.
1 " Straw Jar.
1 box Straws.
1 only Phosphate Bottle.
1 " Lemon Extractor.
1 " Ice Cream Disher. State size desired.
2 " Crushed Fruit Ladles.

Complete outfit as above. **$54.00**

Note—Drum of gas can be obtained from dealers in almost every town of 3000 or more in the United States.

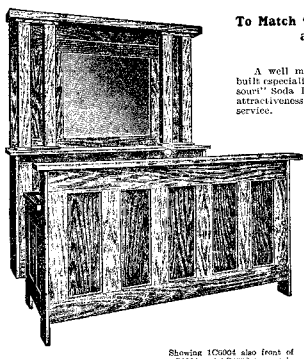
"NEW YORK" SODA DISPENSER

A practical soda fountain which will give as good service as the highest priced.



1C6006—"New York" Enameled Dispenser. Length 31 in., width 11, ht. 14¼. Pan in which dispenser sets is 33x19 in. The entire outfit made of and lined with galvanized iron. Insulated with 1 in. of sheet cork on bottom, all four sides and removable top. Box equipped with 6 porcelain enameled syrup jars of 4 pint capacity each, 6 white metal quick opening faucets, 20 in. block tin cooler, 3 ft. block tin leader pipe with clamp connections, 1 silver plated clear counter double stream draft arm connected to cooler. Syrup faucets will not corrode or contaminate the syrup. All drainage from dispenser runs into pan and from pan to waste outlet. Leader pipe and waste connections so arranged that it is not necessary to cut hole through counter to connect. 6x30 in. drip plate under faucet. White waterproof enameled finish. Soda and syrup always cold. Crated, 110 lbs. Complete, ready to operate. Each, **$50.00**

6½ FT. BACK BAR—Golden Oak Finish



Showing 1C6004 also front of 1C6000 and 1C6002 to match.

To Match "Missouri" and "Illinois" Fountains

A well made but inexpensive back bar; built especially for our "Illinois" and "Missouri" Soda Fountains. Adds much to the attractiveness of the fountain and aids in service.

Length 6½ ft., ht. 7½ ft., base 1 ft. 2 in., ht. of base 3 ft. 6 in., plate glass mirror 33x36 in. The superstructure has four massive columns, giving a very substantial effect. Paneled front and overlapping paneled doors with brass hinges and latch. The cupboard base may be used for storage purposes. It offers every convenience for service. It is a most attractive addition to any fountain of this size. Shipped complete ready to install. Crated, about 250 lbs.

1C6004—Golden oak finish.
1C6005—Birch mahogany finish. Each, **$54.00**

10 GAL. STEEL SODA TANK



Very best drawn steel

1C6020—Ht. 26 in., diam. 14 in., cap. 10 gal., very best drawn steel, standard gauge, 11 lbs. pure block tin lining. Tested to 500 lbs. hydraulic pressure. 1 in pkg. 60 lbs. Each, **$30.00**

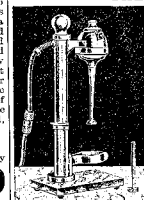
CHARGING OUTFIT

Drum of gas or soda tank not included with this outfit.



1C6021—Consists of heavy brass regulation gauge, hose, tank clamp, wall clamp, wrench, extra washers and connections, 1 rocker. 1 in pkg. 20 lbs. Each, **$9.75**

THE "ELECTRIC" DRINK MIXER



You see this electric drink mixer everywhere. Every user is a booster.

It enables you to serve a great many more people in a given time. Its electric motor-driven agitator, whirling at the rate of 10,000 revolutions a minute, whips the drinks into smooth creamy servers that delight your customers. It stimulates the demand for mixed drinks on which you make a bigger profit.

The "Electric" is an absolute necessity. Some of the big dispensers keep several in steady use. It pays for itself many times over in the time and money saved.

Order now, and start the season RIGHT.

Model "Electric"—Ht. overall 18 in., 6 in. wide and 1 in. thick, nickel plated and polished, with white Italian marble base. Shipping wt. about 15 lbs.
1C6018—Attached stirring rod. Complete, **$14.25**
Sanitary "Electric"—With detachable mixing rod. Just press the clip with the thumb and the agitator slips off the motor shaft and can be thoroughly cleaned. Shipping wt. about 15 lbs.
1C6019—As 1C6018, with detachable "Sanitary" stirring rod. Complete, **$15.50**
Extra Agitators—For above. Each, **75**

Note—"Electric" Mixers will operate on any 110-120 volt circuit either A. C., or D. C., 25 to 60 cycles.

A soda fountain from a 1910 catalog.

beverages were patented. Their inventors became millionaires by selling for a nickel what cost less than half a cent per portion.[68] They were root and herb concoctions and claimed health benefits.

EARLY SOFT DRINKS[69]

Year	Beverage	Where	Health Claim
1876	Hires Root Beer	Philadelphia, Pennsylvania	purifies the blood
1885	Moxie Nerve Food	Lowell, Massachusetts	cures nervousness and paralysis
1885	Dr. Pepper	Texas	aids digestion

Atlanta physician and pharmacist John Stith Pemberton's goal was to invent a potion to free himself from his morphine addiction. In 1885, he invented Pemberton's French Wine Coca, patterned after other fortified wines, like Vin Mariani. It contained two new wonder drugs, coca from Peru's coca leaf and caffeine from the African kola nut. Both were stimulants and also supposedly aphrodisiacs. He claimed it was good for what ailed Americans: exhaustion, constipation, melancholy, impotence, headaches, hysteria, and addiction to opium and morphine, both legal then. (These claims were wrong, of course.) When Atlanta banned the sale of anything with alcohol in it, Pemberton took the wine out of his Wine Coca, added seven secret ingredients, known only as "7X," and Coca-Cola was born.

The first ad for Coca-Cola appeared on May 29, 1886. The year after that, Pemberton took out a patent on Coca-Cola; the year after that he died. The Coca-Cola Company became a corporation in 1892. The formula for Coca-Cola was super-secret for more than 100 years, until 1993, when journalist Mark Pendergrast, researching a history of Coca-Cola, went through their archives. By mistake, they gave him a file that contained Pemberton's original formula for Coke. All of the flavorings—lime juice and oils of orange, lemon, nutmeg, cinnamon, coriander, and orange blossom—are Asian. The only New World flavoring is vanilla. Using orange blossoms is distinctively Middle Eastern. It could almost be a recipe out of al-Baghdadi's medieval cookery book.[70]

Coca-Cola was marketed as a medicine until 1898, when Congress taxed medicines. Then Coca-Cola decided it was a beverage. Until 1899, it could only be enjoyed at soda fountains, because the one ounce of Coca-Cola syrup mixed with carbonated water went flat quickly. Then two lawyers from Chattanooga, Tennessee, had what Coca-Cola's board of directors thought was such a waste-of-time idea that they signed a contract giving the lawyers—for nothing—the right to sell Coke *in bottles*. (As stupid business deals go, this one is right up there with IBM's declaration that computer software would never be worth anything, so Bill Gates could keep all the rights to his programs.)

In April 1898, the United States went to war and Coca-Cola went, too. The name of a new drink made with rum, Coca-Cola, and lime juice represented what Americans intended to do. It was the *Cuba libre*—"free Cuba." Four months later, Spain had been driven out of its last colonies and the war was over. In the Caribbean, the United States acquired Puerto Rico and Guantánamo Naval Base in Cuba. In the Pacific, it gained Guam and the Philippine Islands.

The Philippines

The Portuguese explorer Magellan "discovered" the Philippines in 1521 and was served a banquet of rice and stewed pork followed by roasted fish, ginger, and wine.[71] Rice and pork still figure prominently in Philippine cuisine, as they do in Chinese cuisine, while fish and vegetables are the mainstay of the island table. Because they were Spain's colony for hundreds of years, the main influence on Philippine cuisine is Spanish, along with Chinese, Malaysian, and Indonesian. The Spanish brought the olive oil, vinegar, onions, and garlic native to their own cuisine, and from their colonies in Central and South America brought foods native to the Americas: peanuts, hot peppers, tomatoes, potatoes, sweet potatoes, and corn. Like the Hawaiians and other Pacific island peoples, the Filipinos roast whole suckling pigs. Like the Malaysians and Indonesians, Filipinos stew many foods in coconut milk. From American cooking, Filipinos learned about pies, but they made them their own by using local fruit like mango. Among the "national dishes" are *adobo*, stew with a vinegar-garlic sauce base; *ginataan*, coconut milk stew; and *lumpia,* the Philippine version of spring rolls—vegetables wrapped in rice paper, like a burrito—that are found throughout Asia.

But the Filipinos didn't want American rule any more than they had wanted Spanish rule. They fought hard and they fought for years in a bitter guerilla war that cost hundreds of thousands of lives. A little over 100 years after its birth, the United States was on its way to becoming an imperialist world power—just like European countries.

At the end of the nineteenth century, Asians were in despair. Giant China had fallen, forced open by Europeans. Southeast Asia was under the control of France. Indonesia had been in Dutch hands for centuries. The British had a lock on India. The U.S. had a foothold in the Philippines. As the twentieth century began, Asians looked for hope to one country in Asia that had never been conquered, the land of the rising sun—Japan.



Ninth Course

Sanitation, Nutrition, Colonization: THE NINETEENTH CENTURY IN EUROPE, ASIA, AND AFRICA

The nineteenth century was the Scientific Revolution, Part Two. Scientists and engineers took the theories and instruments discovered during the Scientific Revolution in the seventeenth and eighteenth centuries and created practical applications for them. They created machines that caused revolutions in industry, medicine, and science. Using microscopes and experiments, scientists proved that organisms invisible to the naked eye made food and wine ferment and caused diseases in humans and animals.

While Americans in California gold fields were trying to figure out how to grind coffee and keep their pants from falling apart, scientists in Europe were making huge strides in discovering the causes of disease. The last half of the nineteenth century was a time of increased awareness of health and of belief in science to help make human life better. In France and Germany, a war was on to see which country could find the most microbes. France had Pasteur; in Germany, Koch led the way. You went to the hospital to die.

GERMS AND GENES

In the eighteenth and nineteenth centuries, the Industrial Revolution drove millions of people from the country into cities looking for work. Crowded slums, poor nutrition, and lack of sanitation caused hundreds of thousands of deaths. These were attributed, as they had been since ancient times, to a God or gods being angry. But scientists were taking a new look at nutrition and sanitation.

England: Dr. Snow and the Water Supply

1854. A cholera epidemic struck London. This disease causes death by depleting the body of all fluids, violently and rapidly. But this epidemic was strange: people in one neighborhood got cholera while a block away they didn't. A physician, Dr. John Snow, finally figured out why: people were getting their water from different wells. Those who got cholera used a well that was contaminated by people dumping the contents of their sick babies' diapers down it. (Perhaps number one on the "Things You Never Thought You'd Have to Tell People Not To Do" list.) Dr. Snow had the handle from that pump removed, and ended the cholera epidemic. From this and other scientific experiments came germ theory and an understanding of how diseases spread. The transmission of cholera, typhoid, salmonella, and other sanitation diseases is "fecal-oral"—you get them from poor personal hygiene, sometimes as simple as not washing your hands after you go to the bathroom. In the mid–nineteenth century, London and Paris established public health departments to deal with sanitation in the growing cities.

These efforts by middle- and upper-class reformers to clean up the cities wasn't all from the goodness of their hearts. Having so many sick people and so much filth in the cities was a threat to the health of everyone. Doctors reported city dwellers in Europe living in conditions like slave cabins in the American South, but with much less ventilation: one room that was six feet high, and "ten to fourteen or fifteen feet wide. . . . the walls are plastered with garbage. . . . everywhere are piles of garbage, of ashes, of debris from vegetables picked up from the streets . . . "[1]

The U.S.: Cholera and the Constitution

Cholera eventually reached the United States, too, which was a big shock to Americans. They had assured themselves that they were immune to cholera because they were Christians; "the Asiatic cholera" was a disease of Chinese "heathens." Also, America was the New World, exceptional and clean. No slums, vices, and corruption like the filthy Old World. But cholera was just a disease, and in the nineteenth century, like bubonic

plague in the fourteenth, it followed the trade routes. The difference was that in the nineteenth century, the trade routes were global. In 1832, cholera hit the United States just as hard as it hit every other country it visited—thousands died each day. Americans assumed it was the wrath of God. Wealthy Americans, like wealthy Europeans, fled to their homes in the country. Of those who remained in the city, who lived and who died was puzzling: seemingly religious, upstanding members of the community died while never-do-wells lived. The reason: fine, upstanding citizens drank water from wells they didn't know were contaminated, while street people drank germ-free wine, rum, or gin. Americans were terrified; a group of ministers appealed to president Andrew Jackson for a national day of prayer. Jackson declined, citing the separation of church and state. He said that the ministers were free to lead the country in any prayer to any God they wanted, but it wasn't in the president's job description in the Constitution.[2]

Cholera struck the United States again in 1848–1849. It swept through the poor Irish neighborhoods in eastern cities like New York, killing the Irish just after they arrived, already weakened from the potato famine and weeks on the coffin ships. In the West, travelers on the trails added cholera to the list of dangers they faced. In 1866, right after the Civil War, the third and last major cholera epidemic struck the United States. New York City's response was to do what London and Paris had done: create a public health department. In a little more than thirty years, the American attitude toward disease had changed completely. Disease had gone from being divinely caused to being preventable by science, from a religious problem to a secular one: clean up the water supply. Or, in polite terms, do not defecate where you ingest.

France: Yeast

Something was destroying the wines of France; it was a national disaster. In the middle of the nineteenth century, the wine in France went sour. It smelled bad and tasted worse. It was not even good vinegar. Vintners were mystified: there was nothing wrong with the grapes as they grew on the vines, and they had been harvested, stored, and processed the same way as they had for centuries. But there was no wine in France. This was a tremendous blow to the national economy and to the national pride. Although fermentation had been known for 5,000 years, since the Egyptians discovered that it turned grain into beer, exactly how it occurred remained a mystery. Perhaps the scientists could help. Louis Pasteur looked under his microscope and became the first person in the world to see exactly what caused fermentation: yeast. He also discovered that if you heated the wine to a certain point, the organisms that caused the wine to sour were killed, while the ones that made it ferment and turn into wine lived. This process of heating foods

to destroy organisms that cause spoilage still bears the name of its discoverer: pasteurization. In the United States today, cheese makers want to use raw, unpasteurized milk because heating milk changes it. So far, the FDA has said no.

France: Phylloxera

As part of scientific research, plants and animals were exchanged worldwide, continuing the Columbian Exchange. Sometimes the results were disastrous. Vinifera vines from North America caused an epidemic of phylloxera in Europe. Phylloxera is a tiny yellow aphid that sucks the sap out of the roots of vinifera grapes, while above ground the plant shows no sign of illness. Then, suddenly, the whole plant dies. Phylloxera spreads easily on wind, water, and soil stuck to shoes and equipment. Between the 1860s and 1900, it killed about one-third of the vinifera grapes in Europe. The cure: import American rootstock and graft French grapes onto it. By 1900, less than one-third of the vinifera grapes growing in France were on original French rootstock; the rest were growing on American vines.[3]

England: Darwin and Evolution

In 1859, Charles Darwin published *On the Origin of Species* and proposed a revolutionary theory of how plants and animals survived. From his observations in the remote Galapagos Islands, west of Ecuador in the Pacific Ocean, Darwin deduced that living things evolved or changed to survive, and that humans evolved from apes. Darwin believed that nature weeded out the weak and constantly adapted to new situations to live.

Evolution is still controversial. The complex ideas that it took a book to explain were reduced to a phrase—"survival of the fittest." During the Gilded Age this became the basis of "Social Darwinism" and was used to justify the enormous wealth the robber barons accumulated and kept—they were the fittest and they were surviving. The immigrants who were doing all the work in the factories weren't "fit" so they didn't deserve a decent wage.

In 1925, the famous Scopes "Monkey trial" in Tennessee challenged evolution. Some people believed that the story of creation, according to the Bible, should be taught. Tennessee passed a law making it illegal to teach evolution. A high school biology teacher named Scopes deliberately broke the law so the case would go to trial. He was found guilty of breaking the law and fined $100. In the twenty-first century, creationism versus evolution is still an issue. Some states require labels on biology textbooks warning that they contain the theory of evolution.

Czech Republic: Mendel and Genetics—Bees and Peas

At the same time, halfway around the world, in an abbey in Brno, a community of farmers in what was then Moravia and what is now the Czech Republic, a monk named Gregor Mendel (1822–1884), the son of farmers, had become fascinated with a new science—agriculture. The abbot in charge of the abbey was very interested in science, too, so the abbey already had a garden of rare plants, an herbarium, and a greenhouse. It was in this greenhouse, in 1856, that Mendel began doing experiments with peas *(Pisum sativum)*. Ten years later, in 1866, he published the results of his findings in a local agricultural paper. Nobody noticed. But thirty-five years later, his report was rediscovered and became the basis for the science of genetics. His theories became widely known as "Mendel's laws of heredity." Now, "Mendelian traits" are called "genes," and Mendel is hailed as "the father of genetics."[4]

Mendel wasn't experimenting blindly. At the Institute of Theology in Brno he had studied agriculture, especially apple growing and wine. At the University of Vienna, he had been trained in plant physiology and mathematics, and had studied experimental physics with Doppler. He read *On the Origin of Species,* and he knew about the exciting new theory that German botanists had put forth that all living things were made up of new cells that were created when old cells divided, instead of just appearing spontaneously. All aspects of science fascinated him, including astronomy. But he began by studying meteorology—the weather—in two scientific ways: (1) by observing, and (2) by using statistics to calculate the variations.

Mendel brought these methods of scientific experimentation to his study of peas. For seven years, generation after generation, he studied the shape and color of the peas and their pods, the length of the stem, and the position of the flowers. What Mendel discovered is that traits pass to successive generations unchanged, and that although they are sometimes hidden—what we call "recessive" genes—they never disappear. Dominant genes always appear in a three-to-one ratio to recessive genes. Mendel wanted to see if his observations about the plant world were also true for the animal world, so he began to study and crossbreed bees. A special bee house—an apiary—was built for him, but he died before he could complete his experiments.

Before Mendel, theories of heredity were based on Aristotle's belief that traits were passed from parents to children through tiny particles from each parent. But that didn't explain why some traits were passed on and some weren't. Scientists also believed that it was impossible to change the characteristics of a species or to crossbreed species. Mendel's experiments proved these theories wrong and laid the groundwork for genetically modified foods and the human genome project, completed in 2003, which identified all the genes in the human body. As one sci-

entist said, "the road to the [discovery of DNA] started in the Abbey in Brno."[5] For more information, visit http://www.mendel-museum.org/.

The U.S.: Luther Burbank

Americans were also influenced by evolution and the advances in agricultural science in Europe. Luther Burbank invented—"built" was his word—a better potato, one that would be more resistant to disease, by crossbreeding potatoes to create a hybrid. It was further modified and became the Idaho potato. Burbank was a genius, self-taught, or as he used to say, his school was "the University of Nature."[6] He moved to Napa, California, where he experimented with more than 4,500 species of plants, including seeds and seedlings from India, France, Chile, Persia, Mexico, and Japan, and "built" many other new plant, including the Santa Rosa Plum; the plumcot, a plum-apricot cross; and the Shasta daisy. He also created a white blackberry, called "Iceberg," but no one was interested.

THE BRITISH EMPIRE

Ireland: Swift's "Modest Proposal" for Ending Famine

In the nineteenth century, the British presence in northern Ireland continued to be a source of friction as British landlords grew richer while Irish peasants were on the brink of starvation. More than a century earlier, in 1729, Jonathan Swift, the British author who is most famous for writing *Gulliver's Travels*, had written a short piece called *A Modest Proposal*, subtitled "For Preventing the Children of Poor People in Ireland From Being a Burden to Their Parents or Country, and for Making Them Beneficial to the Public." It was a bitter, dark satire about the extreme poverty among the Irish and how to cure it:

> [A] young healthy child well nursed is at a year old a most delicious, nourishing and wholesome food, whether stewed, roasted, baked, or boiled, and I make no doubt that it will equally serve in a fricassee, or a ragout. . . . A child will make two dishes at an entertainment for friends, and when the family dines alone, the fore or hind quarter will make a reasonable dish, and seasoned with a little pepper or salt will be very good boiled on the fourth day, especially in winter.[7]

The starving Irish missed the humor, because they felt the British would have done it if they could have gotten away with it. Nothing had changed, except maybe to get worse, in a century. There was no shortage of food in Ireland, but there was inequality in food distribution. The Irish, like the

serfs in the Middle Ages and the slaves in the American South, raised the food but were not allowed to eat it, because it was exported for profit. The mainstay of the Irish diet was a New World root vegetable.

Ireland: The Potato Famine

The potato, which would grow in poor soil where nothing else as nutritious would, allowed the population of Ireland to increase more than it would have on any other food. The potatoes were usually eaten boiled in their skins. The pot was placed on the floor, everyone squatted around it. Condiments were salt, mustard, and sometimes buttermilk. Mashed potatoes were invented here: take the potatoes, some of the potato water, add the condiments. An adult male ate thirteen or fourteen potatoes per day, and very little else. Occasionally there were eggs or oats.[8]

Then, in the 1840s, a disease turned the leaves and stems of the potato plants black and rotted the roots. The potatoes died, and so did the Irish. As a solution, corn—maize—was imported from America. But Irish mills, made for processing soft grains like oats and wheat, couldn't make a dent in corn. The corn rotted; the people starved. They picked nettles that grew on graves. Like the Mongol horsemen 500 years earlier, they slit the necks of their farm animals and drank the blood. Sometimes the animals died, too.

Approximately one million Irish died during the famine. Another million decided they would go to a new place, a place where there was food, where they would not be persecuted because of their religion, where the land was rich and the streets were paved with gold. They would start over in America.

Holiday History

ST. PATRICK'S DAY, MARCH 17

St. Patrick's Day is the most widely celebrated festival in the world.[9] It honors the patron saint who arrived in Ireland—called the "Emerald Isle" because of its lush green landscape—in A.D. 432, converted the people to Christianity, and banished all the snakes (although evidence indicates there never were snakes in Ireland). The seventy-five St. Patrick's Day festivals in the United States involve much wearing of the green; dancing to Irish drums, strings, and bagpipe music; and eating traditional corned beef and cabbage and drinking green-colored beer. The first St. Patrick's Day celebration was in 1762. It was in New York City because the Irish in Ireland, under British rule, couldn't celebrate being Irish. Chicago was the first city to dye its river green on St. Patrick's Day (www.chicagostpatsparade.com).

The Industrial Revolution

The Irish were peasant farmers. Although the Industrial Revolution—the use of machines to do work—began in England in the middle of the eighteenth century, the Irish were not part of it. The first industry to be mechanized was textiles—spinning and weaving cloth. People who had lived on small farms streamed from the country into the cities where they lived in crowded conditions and worked in factories fifteen or more hours per day, even children as young as six. The clothes this new labor force mass produced became more affordable for more people. The people who made the clothes became poorer and, separated from the farm, less well nourished. But the people who owned the factories, supplied the raw materials, and sold the finished product became a prosperous new middle class with new eating habits.

Isabella Beeton: *The Book of Household Management*

A book that describes this new middle-class life is Isabella Beeton's 1,112-page *Book of Household Management*, published in London in 1861. It contains:

> Information for the Mistress, Housekeeper, Cook, Kitchen-Maid, Butler, Footman, Coachman, Valet, Upper and Under House-Maids, Lady's Maid, Maid-of-All-Work, Laundry-Maid, Nurse and Nurse-Maid, Monthly, Wet, and Sick Nurses, Etc. Etc.; Also, Sanitary, Medical, & Legal Memoranda.[10]

Clearly, the new British middle-class housewife was a household manager, in charge of a many-roomed house, nutrition, and sanitation for her family and a large staff, including child-rearing, invalids, what invalidates a will, and how to keep hair from falling out.

It is not surprising that a cookbook published so soon after Dr. Snow's discovery of the cause of cholera and its cure—boiling—would contain many boiled foods. These new middle-class people were meat-eaters. Out of 845 pages of recipes, 255 are for meat; most cooked by boiling. She cites laboratory studies supporting the health benefits of boiling, because "the juice of flesh is water, holding in solution many substances . . . which are of the highest value as articles of food."[11] A fifty-three-page chapter about vegetables—mostly boiled—even has a recipe for boiled salad: boil two heads of celery and one pint of French beans separately until tender, cut celery into two-inch pieces. Garnishes are chopped lettuce, blanched endive, or boiled cauliflower.[12] Suggested sauces are made of (1) milk, oil, vinegar, mustard, sugar, salt, and cayenne; (2) eggs, cream, vinegar, mustard, salt, white and cayenne pepper; or (3) egg, oil, cream, vinegar, mustard, sugar, salt.[13] There are also four chapters that

reflect the British love of dessert and tea time—one chapter on puddings and pastry; one on creams, jellies, soufflés, omelets, and sweet dishes; another on preserves, confectionery, ices, and dessert dishes; and one on bread, biscuits, and cakes.

The book is a masterpiece of organization. Each recipe provides information on ingredients, method, time, average cost, how many portions it makes, and when the ingredients are in season. Most measurements are by weight; exceptions are "a heaping tablespoonful" or "2 dessert-spoonfuls." Each recipe is numbered, so cooks can find them and cross-reference them easily.

It is ironic that the woman who was an authority on sanitation died from a sanitation disease. In earlier times, a female midwife stayed with a woman during her "lying-in" as birth was called, and did only that. When men took over the medical profession, they came to women giving birth after setting broken legs, treating infections, doing autopsies. Maybe they washed their hands. Women began to die of an infection called "childbed (puerperal) fever," and so did Isabella Beeton, after giving birth to her third child. She was twenty-eight years old.

The new middle class European life that Isabella Beeton was part of depended on factories. Factories needed raw materials, and the displaced farmers and their families who came to the cities by the millions to work in them needed food. The European powers turned to other continents to provide the raw materials and food they needed, and markets to sell the goods they manufactured. In the nineteenth century, the major explorations were to Africa and Asia.

AFRICA ENSLAVED: WORKING FOR PEANUTS

Africa is an enormous continent. It has the longest river in the world, the Nile; by far the largest desert, the Sahara; and the fourth tallest mountain, Kilimanjaro—at 19,340 feet, almost a mile higher than the highest peak in the continental United States, California's Mt. Whitney. Its other climate zones range from Mediterranean in the north to rain forest at the equator. It also has vast savannas—grassy plains—where herds of lions, leopards, and zebras roam.

In the nineteenth century, Europeans invaded Africa. Between 1878 and 1913, every country on the African continent with the exceptions of Liberia on the west coast and Ethiopia on the east fell to a European power, and in 1935, Italy took Ethiopia. Three things enabled Europeans to colonize Africa: quinine, a New World herb that warded off malaria; the steamship, which made sailing upstream into the interior of Africa possible; and machine guns, which allowed a handful of men to control millions. France had the greatest amount of territory, almost thirty-six



Eastern Hemisphere. *Courtesy Corbis Digital Stock*

percent of the continent, which it controlled with the French Foreign Legion. Most of it was in the northwest, the modern countries of Algeria, Morocco, Mauritania, Mali, Niger, and Chad. England followed with more than thirty-two percent, mostly in the east and south, including modern Egypt, the Sudan, Uganda, Kenya, part of Tanzania, Zambia, Zimbabwe, Botswana, and South Africa. Germany and Belgium had almost eight percent each. Portugal, Italy, and Spain split what was left. This is why there are croissants and baguettes in Nigeria and the Ivory Coast in west Africa, spaghetti in Ethiopia and Eritrea on the east, and curry and chutney in British east and west Africa.

The British attitude towards people of other cultures was profoundly racist. Cecil Rhodes stated: "I contend that we [Britons] are the first race in the world, and the more of the world we inhabit, the better it is for the hu-

man race."[14] These colonial powers caused complete disruption of the life and the land, the cuisine and the culture. They forced the native people to grow non-native staple crops like peanuts and cacao, which displaced native African foods. By the end of the nineteenth century, Africa was the world's leading producer of cacao. This caused the economy to shift from a self-sufficient barter system to cash, because the native people now had to buy food with money, so they had to work for wages. Some went to work on rubber plantations in the Belgian Congo, under the extremely harsh rule of King Leopold. Workers who didn't do their work well enough or quickly enough had their hands or feet cut off. The Congo was also rich in copper and tin. But South Africa was a gold mine—literally.

African Cuisine

Africa was blessed with relatively few native food plants and animals. Among them are okra, watermelon, and yams.

Culinary Confusion

YAM AND SWEET POTATO

What Americans call yams aren't yams. They are a darker kind of sweet potato, native to the Americas, a member of the morning glory family. The true yam, found in Africa and Asia, is a large, starchy root that can grow six feet underground, which makes it difficult to dig up. According to Alan Davidson, "It was probably slave traders who introduced the sweet potato to Africa, where it was called *igname* or *nyam,* which simply means 'yam.' Since that time the sweet potato has been steadily displacing the true yam as a major carbohydrate food in tropical Africa."[15]

Much of modern African cuisine is the colonial cuisine that Europeans forced upon Africans in the nineteenth century and even earlier. In antiquity, Near Eastern, Greek, and Roman peoples came to trade in Alexandria and introduced wheat, barley, sheep and goats. Then from the seventh through the fifteenth century, the Arabs dominated and brought spices like cumin, coriander, cinnamon, ginger, and black pepper to the northern and eastern coasts of Africa. The slave traders brought New World peanuts to grow to feed slaves during the Middle Passage. Chile peppers migrated south from the Iberian peninsula. But Europeans were restricted to the coasts until the nineteenth century, when they began to penetrate the interior. First came missionaries. The most famous was Dr. Livingstone, who finally questioned what he was doing there

when the Africans had their own religions. Farmers followed missionaries, and the military came to protect them and businesses.

Because of Africa's geographical and cultural diversity, it has developed distinct regional cuisines. Common to the cuisines of north Africa—called the Maghreb—is the chile pepper, used in harissa, Tunisia's main condiment of dried chile peppers, olive oil, garlic, cumin, cinnamon, coriander, and caraway.[16] Throughout Africa, chile peppers are the main spice; there are words for them in many languages in Africa—*piment* in French; in Swahili, *pili-pili, peri-peri*, *piri-piri*, which is also the name of the chile-spiced stew that is the national dish of Mozambique, Portugal's former colony. In Africa, chiles are spice, medicine, aphrodisiac, and the food that was supposed to make them immortal.

A stew of meat and fruit or meat and vegetables, in Arabic, the *tajin* or *tagine* (TAH zhin) of al-Baghdadi (*touajen* is the plural) is prepared in the cooking vessel of the same name, with a cone-shaped top to allow steam to escape. Or the *tajin* can be cooked in the bottom of a pot with a steamer insert. The steam from the *tajin* wafts up to cook the couscous in the top section. Couscous, the staple food in northern Africa, probably originated with the native Berbers. It is tiny balls (one-eighth to less than one-sixteenth of an inch) of semolina wheat (the kind used for pasta), barley, millet, or maize flour mixed with salted water.[17] It can also be steamed by itself in a *couscousière* (a French word), or cooked in the stew.

Spiced meat is cubed into kebabs or ground into *kefta*. Both are cooked on a skewer over a charcoal fire. *Kefta* can also be fried or shaped flat like a hamburger. Spiciness is provided by a Moroccan spice mix, *Ras el Hanout*, and olives and lemons cured in salt. Spices are sold in bulk at the souk, or marketplace, as in this picture of a souk in Tunisia:



Souk in Tunisia. *Photo courtesy Nancy Uhrhammer*

The Moroccan masterpiece is bastilla (one of various spellings, pronounced buh STEE yah), layers of contrasting tastes and textures wrapped in flaky dough. The Moroccan pastry, even thinner than phyllo (or filo), is called *warqa* (leaf). The layers inside are chicken (originally pigeon or squab) stewed in spices until it falls off the bone. Some of the reduced stewing liquid, along with lemon juice, is mixed with eggs and scrambled until silky. Crunchy chopped almonds are sautéed in butter, dusted with cinnamon and sugar, and sprinkled on top before it is all enveloped in buttered *warqa* and baked.

You break off a piece and eat it with your hands—only the right hand, because Arabs reserve the left hand for personal hygiene. It is customary to use only the thumb and the first two fingers, to show restraint, instead of greedily using all four.[18] As rich as it is, bastilla is not the main course—just the first or second. The desserts in northern Africa are also Arab-influenced and very sweet with sugar syrup or honey. Everything is washed down with spearmint tea.

West Africa has tropical beaches and tropical fruit: pineapple, mango, papaya, coconut. An abundance of fish is preserved by drying, smoking, or salting. Although West Africa is a large grower of cacao, it is not processed there. The beans are shipped to Europe or the United States for processing, then shipped back to Africa as candy, so it is expensive and usually found only in cities and eaten by foreigners.[19] West African meals are one course, and one-pot stews, often thickened with peanuts. Foods are cooked in palm oil. The staple starch is *fufu* (also *foofoo* and numerous other spellings)—cassava, maize, yams, plaintains, or rice pounded and mashed, then boiled, steamed, baked, or fried.[20] Chicken is the most valued meat, but snails are eaten more often. One popular Nigerian street food sounds perfect for Super Bowl Sunday: beef marinated in beer, rolled in ground peanuts and chile, then grilled over charcoal.[21]

In the absence of Muslim influence, there are also palm wine, roast pork, and homemade beer, brewed from "corn, sorghum, or millet; in the rain-forests, mashed bananas are the base." In southern Africa, beer is brewed from the fruit of the Maroela tree which falls to the ground and ferments. What the humans don't harvest, the elephants eat. It makes them drunk and dangerous.[22]

Snack foods include locusts steamed, sautéed, and seasoned with chiles; and termites. African termites build enormous mounds aboveground; anteaters (aardvarks) use their sharp claws to tear down the clay-like walls, and long snouts and sticky tongues to penetrate the narrow tunnels inside the mounds. When the termites fly and swarm, looking for a new place to build, humans catch and eat them. They are very high in protein and supposedly taste like peanut butter. Game meat is also eaten: aardvark, eland (a large antelope), venison, ostrich, gazelle, hippopotamus, giraffe, crocodile, a seven-pound frog, rats, and bats.

Many of the ports of Africa were originally settled by European countries as stations where their ships could stop for repairs and supplies, including food. South Africa, almost halfway between Indonesia and the Netherlands, served this purpose for the Dutch East India Company, which first established a colony there in 1652. They immediately planted fruits and vegetables that would keep the ships' crews healthy and free from scurvy and other vitamin-deficiency diseases: "sweet potatoes, pineapples, watermelons, pumpkins, cucumbers, radishes, and citrus trees such as lemons and oranges."[23] They also made a dried meat, like jerky, called biltong. By the eighteenth century, the Dutch brought slaves from Malaysia and their spicy cuisine, including one dish called *kerrie-kerrie*, later shortened to *curry*. Another Malaysian spice mixture composed of onions, ginger, dried shrimp or prawns, and chile powder, is called a sambal.[24]

In eastern Africa, in Ethiopia and Eritrea, *injera* bread, like a thick, elastic sourdough crepe, is "the daily bread, tablecloth, and silverware."[25] The bottom of an enormous round tray the diameter of a small table is lined with *injera*; the stew is on top of the bread, soaks into it, and is used to scoop up the food with the hand. The east also has strong Indian influences because the British brought experienced workers from India to work on the railroad in Africa, including one young man named Gandhi, who later led the successful fight for India's freedom.

INDIA: "THE JEWEL IN THE CROWN"

India was called the jewel in the crown because it was England's most valuable colony. Its fertile land produced foodstuffs like tea and coffee. In the 1860s, cotton for England's textile factories also became extremely important when American cotton was cut off by the American Civil War. India's population of 300 million provided a huge market for England's manufactured goods.

The British in India were the ruling class, so an army officer could live and eat like a raja—king. Breakfasts were substantial: boiled or fried fish or prawns, a curry or casserole, cold mutton, bread and butter or rice, plaintains or oranges. Kedgeree (Isabella Beeton spells it kegeree) was a popular British breakfast of "Any cold fish, 1 teacupful of boiled rice, 1 oz. of butter, 1 teaspoonful of mustard, 2 soft-boiled eggs, salt and cayenne to taste," all mixed together and served hot.[26] The household of a British official had its own deer, cows, calves, sheep, kids, ducks, geese, and rabbits, so an important dinner could include fifteen or sixteen meat courses. One woman described an average daily main

meal in 1780: "We dine at 2 O'clock in the very heat of the day . . . A soup, a roast fowl, curry and rice, a mutton pie, forequarter of lamb, a rice pudding, tarts, very good cheese, fresh churned butter, excellent Madeira."[27] Nap time followed, then socializing and visiting. Supper was a light evening meal.

A century later, the meals were reversed—the midday meal was light, while the heavy main meal was a social event at 7:00 or 8:00 p.m. After 1807, the word *tiffin* appears. This is a light midday meal, from the British word that is the equivalent of *snack*. The arrival of wives shifted food away from native Indian to Anglo-Indian or purely British food like roast meats, puddings, and sandwiches. Curry was popular with Anglo-Indians, but not in its original meaning as a spiced relish from south India. Instead, it became a catch-all word that could mean broth, a wet stew, or a dry dish. Drinking increased. The beverage of choice was claret. A man could drink three bottles after dinner; a woman, one a day. They also drank Champagne, brandy, and beer. Servants prepared and served the food.[28]

In 1857, beef and pork caused the Hindu and Muslim sepoys—Indian soldiers in the British East India Company army—to mutiny. A rumor, untrue, spread that the rifle cartridges were smeared with beef and pork fat. The sepoys were incensed because they had to break the cartridges open with their teeth. It took a year for the British to regain control of India. In 1869, the same year that the United States completed the transcontinental railroad, Lucknow—the last province that was resistant to the British—fell.

India also produced a crop that proved crucial in expanding the British Empire. It was grown cheaply in India, then transported to China on British ships and sold to the Chinese. The plant's name in Latin is *Papavera somnifera*—"poppy-put-you-to-sleep"—the product processed from its sticky juice is opium.

CHINA: TEA AND OPIUM

In the nineteenth century, the British treasury had an unfavorable balance of trade with China. The British wanted tea; the Chinese wanted nothing except payment in silver. The British had to find something to sell to China. They decided on opium—a depressant drug, a "downer." It was highly addictive so there would be return customers. The Chinese emperor objected to Queen Victoria. She responded the way Elizabeth I responded to the king of Spain in the 1580s when he complained about pirates hijacking British ships in the Caribbean—she ignored him.

There was a war, but the Chinese navy was no match for British steamships and guns. By 1842, the Opium Wars were over and China was forced to give the island of Hong Kong to the British. Before the Opium Wars, the emperor had allowed foreign ships to anchor only in the city of Canton (now Guangzhou) in southern China. Afterward, five major ports were open. In effect, foreign money, businesses, governments, and guns were calling the shots in China. This destabilized the government, caused civil wars in China for almost a century, the end of thousands of years of empire (and the emperor) in 1911, and made China vulnerable to invasion by Japan in 1937.

Cantonese Cuisine

Historian E. N. Anderson, in *The Food of China*, states: "Cantonese food, at its best, is probably unequalled in China and possibly in the world."[29] The freshest ingredients, drawn from all regions of China, split-second timing, a wide variety of techniques, hundreds of superb dishes, and the ability to quickly absorb new foods and techniques—like baking—from other cuisines make for an ever-expanding, innovative cuisine. Unfortunately, what most Americans know as Cantonese cuisine—isn't. The sweet and sour pork, chop suey, chow mein, greasy egg rolls, and fried rice that became popular in the United States in the 1950s and 1960s are not at all representative of Cantonese cuisine. It was "dumbed down" and sweetened up for American taste buds. The Cantonese have even fewer desserts than other areas of China, so they do not use sugar with a heavy hand in their main dishes. Cantonese cuisine uses—sparingly—chile sauce, hot mustard, vinegars, sesame oil, and soy and oyster sauces. Fish and seafood, from oysters to sea cucumbers, squid, jellyfish, and croaker, are Cantonese specialties. They are often steamed, stir fried, or deep fried. They are not slathered in cornstarch, canned pineapple juice, and questionable flavor enhancers like MSG—monosodium glutamate. (This perhaps began at Trader Vic's restaurant in California.) The Cantonese regard this kind of cooking and the people who eat it the same way the Romans regarded people who had never had bread and put meat under their saddle to warm it up—as barbarians.

The delicacy of Cantonese cuisine comes out in *tim sam* (*dim sum*), which means "small eating." These are bite-sized dumplings, pieces of dough wrapped around a spiced meat or seafood filling, then steamed. Sometimes they are wrapped in lotus or bamboo leaves and steamed, the way Mexican cuisine uses corn husks to wrap tamales, or other cultures use banana leaves. Cantonese cuisine is also the cuisine of the islands of Macau and Hong Kong. By treaty, England gave Hong Kong back to the Chinese on July 1, 1997. Many people left Hong Kong and brought their cuisine with them; there are now many fine Cantonese restaurants in the United States.

Food Fable

THE ORIGIN OF CHOP SUEY

It is a myth that chop suey is of American origin. As the story goes, someone went to a restaurant in San Francisco's Chinatown just before closing time, so the chef threw together all the leftover odds and ends. Chop suey is leftovers, but from Canton, where *tsap seui* means "miscellaneous scraps."[30]

China and India: "Coolies," the New Slaves

In the nineteenth century, Chinese and Indians became a new source of slave labor throughout the world. They were known as *coolies*, a word with obscure origins. The African slave ships were the model for the coolie ships, and as on the African ships, the coolies died and mutinied. Sometimes Chinese lured other Chinese into servitude with offers of jobs as cooks for the French in Canton, or with the Chinese army. Chinese and Indian workers were shipped as far away as the Caribbean, where they worked twenty-one hours a day making sugar. Others ended up in California in the gold fields or working on the railroad. And, of course, they brought their cuisine and their culture with them.

Thailand (Siam)

One country in Southeast Asia managed to remain independent because of its extraordinary ruler. Thailand's King Rama IV, a Buddhist, was a monk for twenty-seven years before he became king. His training in patience and humility—and his own intelligence and shrewdness—served him well as he negotiated with American and European diplomats during his reign from 1851 to 1868. With two-thirds of the land in Thailand unsuitable for farming, it began to trade with Western countries, which valued Thai rubber, tin, and teak. Thailand accepted some beneficial things from Western Christian missionaries, like the printing press and smallpox vaccinations, but kept its culture. This included slavery. Most Westerners know about nineteenth-century Thailand from the 1870 autobiography written by Anna Leonowens, the British woman who tutored the king's family. *Anna and the King of Siam* became the Broadway play and movie *The King and I,* remade in 1999 as *Anna and the King*, starring Jodie Foster. Thais object to these accounts and they are banned in Thailand.

The staple food in Thailand, as in other Asian countries, is rice. Every year, a sacred ceremony signals the beginning of the rice planting season.

Holiday History

ROYAL PLOWING CEREMONY

"Traditionally, the rice growing season in Thailand commences in May with the Royal Plowing Ceremony. It takes place near Bangkok's Grand Palace, in a spacious, grassy expanse called *Sanahm Luahng* ('the field of the King'). During the ritual, an official . . . appointed by the king uses a ceremonial plow drawn by white bulls to plow a long furrow into the field. He is followed by chanting Brahman priests and by four women carrying baskets of rice seed. The women scatter the seed in the plowed furrow. Once it has been sown and the ceremony is concluded, the onlookers scramble for the rice seed in the furrow, as it is believed that if these seeds are mixed with one's own, a good crop will be ensured."[31]

The rice they were planting in the ancient Royal Plowing Ceremony wasn't Thailand's most famous rice—jasmine—because it didn't exist until 1945. This long-grain rice was the result of a genetic modification experiment, and grows best in northeastern Thailand.

Thailand, between China to the east and India to the west, has much in common with both cuisines. With southern Chinese Szechuan and Yunan cuisine, it shares the use of two New World foods, peanuts and chiles. It

INGREDIENTS:

Tom Yung Kung (Dom Yam Gung)

Thai Hot and Sour Shrimp Soup[32]

1 Tablespoon vegetable oil
shrimp shells
8 c. chicken stock
1½ teaspoons salt
3 stalks lemon grass
4 citrus leaves
1 teaspoon lime zest
2 green serrano chilies
2 pounds fresh (green) shrimp (20 ct)
1 Tablespoon nam pla
juice of 2 limes
1 red serrano chili
2 Tablespoons cilantro, chopped
3 green onions, chopped

has curries *(gaang)* in common with India. The name of one curry is a clue to who introduced it: *massuman* is Thai for *musselman*, an early English corruption of "Muslim." The signature seasoning is *nam plah*, a pungent, salty fish sauce, but fresh herbs like small-leaved Thai basil, mint, and cilantro are also used. Cilantro roots, which are cut off in Western markets, add a more intense flavor to Thai cooking. Lemon grass and lime leaves and juice add citrus-sharpness. By contrast, Thai drinks and desserts are very sweet, like Arab desserts. The ingredients of two dishes illustrate these contrasts: *Tom Yung Kung*—Hot and Sour Shrimp Soup—and Mango with Sticky Rice.

INGREDIENTS:

Mamuang Kao Nieo

Mango with Sticky Rice[33]

1½ cups glutinous rice
1 c. thick coconut milk
½ cup palm sugar
½ teaspoon salt
5 ripe mangoes
4 Tablespoons coconut "cream"

Indonesian Cuisine—The Spice Islands

Indonesia, the fourth most populous country in the world, is a chain of large islands in the South Pacific. The area is subject to nature at its most violent: volcanoes whose ash provides fertilizer, earthquakes, and tidal waves. The world became acutely aware of Indonesia on December 26, 2004, when massive undersea earthquakes triggered tsunamis that killed hundreds of thousands and left millions homeless. Hardest hit was Indonesia's northernmost province, Banda Aceh.

"The standard everyday meal for millions of country people in Indonesia consists of boiled white rice, a little dried fish, and some chilli peppers. It must be white, fully milled, rice; brown rice, with the bran still on, may be more nutritious but is reserved for very young children and invalids."[34] This is in sharp contrast to the feast called *Rijsttafel*—"Rice Table." This is a purely Dutch invention, patterned after the Indonesian custom of putting all the food on the table at once, like *service à la française*. Except that the Dutch took all different kinds of Indonesian food out of context and served it all at once. It would be as if people from another country came to the United States and claimed that a typical American holiday dinner was New Year's Eve Champagne

and caviar, Super Bowl guacamole, Valentine chocolate hearts, Fourth of July hot dogs, Thanksgiving turkey, and Christmas ham.

Holiday History

SELAMETAN

A *selametan* is an ancient native feast that existed before Muslims came to the Spice Islands. *Selametans* mark major rites of passage—birth, marriage, pregnancy, death—but they can also be to give thanks for a good harvest, to bless a new house, or before a trip. Whatever the occasion, it is a celebration of sharing and of community. It is also a time to make offerings to the spirits that control good fortune.

The centerpiece of a *selametan* is rice, either white cooked in coconut milk—*nasi gurih* or *nasi uduk*—or yellow from turmeric—*nasi kuning*. But how many dishes are served with it, which dishes, and how spicy they are, varies with the event. The cooking and cleaning up are communal, too.

The example Indonesian chef Sri Owen gives is a *selametan* for a woman in the seventh month of pregnancy, so there are seven hard-boiled eggs. The traditional vegetables are "*kacang panjang* (yard-long beans), *kangkung* (water spinach), *taoge* (beansprouts), and . . . *kol* (cabbage). The *bumbu* or coconut dressing should not be . . . chilli-hot because a pregnant woman must not eat hot food. There should also be a steamed coconut relish . . . mixed with some minced beef and wrapped in seven banana-leaf packets."[35]

EASTERN EUROPE

Ludwig, the Mad King of Bavaria, and the Fairy-Tale Kitchen

In 1864, nineteen-year-old Ludwig II became the king of beautiful Bavaria, in the Alps in southern Germany. Most Americans know Bavaria because of the cars made by Bavarian Motor Works (BMW) and because in German, Bavaria is "Bayer"—as in aspirin. Ludwig loved palaces and swans, which were on the Bavarian coat of arms. To provide work for his subjects in a slow economy, he began building castles. They were nineteenth-century Gothic, patterned after the medieval castles he grew up in. The paintings, frescoes, tapestries, and sculptures celebrated heroes from German mythology like Siegfried slaying the dragon. The ceilings were decorated with scenes from the operas of famous German composers like Wagner. Mechanical swans swam in man-made streams. But

the castles were bankrupting the kingdom. In 1886, when Ludwig announced he was going to build a fourth castle, he drowned under mysterious circumstances. Some say that nobles lured him onto a boat, went to the middle of the lake, and pushed him overboard.

At one castle, Neuschwanstein—"New Swan Castle"—built from 1869 to 1886, Ludwig spared no expense in creating an ultra-modern kitchen. Huge round polished granite columns supported an arched and vaulted ceiling. The kitchen also boasted a granite fish tank, hot and cold running water, a grill, an enormous cooktop that vented under the wood floor, and a wall oven. Rising heat was put to work in two ways. As it passed from the stove to the chimney, it was directed through a plate warmer. Then, hot air in the chimney turned the blades of a turbine connected to a gear that automatically turned the spit-roasters. Before elevators, dumbwaiters hauled firewood for the stoves and sent the cooked food up three floors to the elaborate dining room.[36]

Most Americans have never seen Neuschwanstein but they would recognize it instantly—it is the model for Sleeping Beauty's Castle at Disneyland, but infinitely more beautiful. To see the real castle, log onto http://www.germanworld.com/neu.htm.

For two weeks every year, the Bavarian city of Munich hosts the world's largest beer festival, the Oktoberfest, which began with Ludwig II's grandfather.

Holiday History

OKTOBERFEST

The first Oktoberfest was on October 12, 1810, to celebrate the marriage of Prince (later king) Ludwig I and Princess Therese. The festivities finished with horse races. It was so much fun they did it again the next year. Over the years, an agricultural show was added, then a carousel, then beer stands. The beer tents that Oktoberfest is famous for now first appeared in 1896.[37] Today, millions of people attend the festival, chowing down on sausage and drinking beer from steins.

The Franco-Prussian War of 1870: Escoffier Cooks for the Army

When France declared war on Germany in 1870, French military officers raced everywhere trying to be first to corner the best cooks. It just wouldn't be civilized to go to war without a chef. One of the rising chefs

in Paris was August Escoffier, a twenty-two-year-old from the French Riviera. He was gifted and he was motivated, and he became the chef to the General Staff. At the beginning of the war, Escoffier was preparing *blanquette de veau*, roast sirloin, and rabbit in pork fat, cognac, and white wine close to the battlefield. He knew food would become scarce, so he planned ahead. He became his own farmer, purveyor, and forager. He set up a secret little farmyard so he could have fresh eggs, milk, chickens, geese, rabbits, pigs, sheep, and turkeys.

Supplemented with the officers' own stashes of wine and brandies, it paid off. During a siege, the General Staff continued to eat well long after the other cavalry officers had eaten their last good meal—and their last horse. Eventually, however, Escoffier, too, was reduced to using the cavalry officers' horses in *pot-au-feu de cheval* and *cheval aux lentilles*. He and another chef were taken prisoners of war and escaped, but they were captured again when they tried to get jobs in a German *pâtisserie*.[38]

Alsace: Franco-German Cuisine

One disputed area was the province of Alsace, east of Champagne, on France's border with Germany along the Rhine River. Not surprisingly, the cuisine shows a hearty Franco-German fusion. The food from this area that is probably most familiar to Americans is quiche, the savory custard tart with bits of bacon or ham (traditionally, no cheese[39]) which became popular in the United States in the last decades of the twentieth century. Quiche goes well with the white wines the region produces, like Riesling. But Alsatians consume twice as much beer as people in other parts of France; like nearby Belgium, they use it in cooking, too, especially in soup. Alsatians love *choucroûte*—sauerkraut with pork and sausages. Strasbourg is famous for its Gothic cathedral and *pâté foie gras* baked in a pastry crust; Munster is famous for its soft cheese. The bread, unlike the white bread so prized elsewhere in France, can be dark like German bread, made with rye or whole wheat. Typically German seasonings found in Alsatian cuisine are juniper, caraway, and horseradish.[40]

Along with French tarts and petits fours, pastry shops in Alsace make German Black Forest Cake (*Schwarzwalder Torte*), layers of chocolate genoise, whipped cream, and morello cherries drenched in kirsch—cherry brandy—and named after the nearby forest. No Alsatian bride set up housekeeping without the distinctive deep, swirled mold for *Kugelhopf* (a German word), a sweet bread studded with nuts and raisins that used to be for special occasions but now is a breakfast standard. The mold gets its name from *kugel*, meaning ball; and *hopf*, from hops, because formerly beer made the batter rise. Terra-cotta molds were preferred over copper because they absorb butter, making the crust on each

bread better than the last. In addition to the molds for wafers—*gaufres*—Alsatians have numerous molds for shaped spiced cakes or gingerbreads: a star for Christmas, fish or eel (once abundant in the Rhine River) for New Year, a fleur-de-lis for Epiphany, a lamb for Easter, a baby for a baptism, and the famous French rooster for patriotic events.[41]

Before the Franco-Prussian War ended in 1871, Prussia had put Paris under siege. The starving French ate their pet dogs and cats and then the zoo animals. The victorious Germans, from the Palace of Versailles, announced to the world that the German Empire had been created. They took Alsace-Lorraine and forced France to pay a large sum of money before the German army would march out of Paris.

The Austro-Hungarian Empire

Austria's most well-known foods are *Wiener Schnitzel* (Vienna veal cutlets) and apple strudel, a flaky filled pastry. The cutlets are breaded and fried (sometimes stuffed first). Paprika Schnitzel is cutlets seasoned with paprika, sauced with sour cream and a touch of tomato. Apple strudel is sweetened with sugar and raisins, made tart with cinnamon. Americans know strudel only as sweet pastry, but in Austria it can also be savory, filled with fried brains or mushrooms. Cream puffs (profiteroles), too, can have savory fillings like ham, liver, or chicken, with a béchamel-based sauce. The Eastern European staples—cabbage, caraway, mushrooms, and sour cream—are often combined with pork and potatoes. A common accompaniment for meat is parsley potatoes. Recipes for sauerkraut abound. *Liptauer* is cream cheese seasoned with capers, herbs, and anchovies. It can be an appetizer or light meal, spread on bread or toast like an open-faced sandwich. *Nockerl* are dumplings either dropped into soup from a spoon or pushed through a sieve with large holes. Beets, kohlrabi, and other root vegetables are used in soup and salad. Another famous dessert is Sachertorte (supposedly named after Mr. Sacher, a hotel owner), a chocolate cake spread with apricot jam and a chocolate glaze.

The Hungarian part of the Austro-Hungarian Empire had its own sophisticated cuisine, especially in the capital city of Budapest. The signature spice is paprika, like all the vegetable peppers, a New World native, but genetically modified into something uniquely Hungarian. Bell peppers are also stuffed, as is cabbage. But the most famous Hungarian dish is the stew called *guylas*—pronounced "goolash." If you are eating anything *à la Eszterhazy,* it is named after an old noble family and is definitely *de luxe.*

But many people in Hungary were too poor to afford the new confection. They would go to a new place, where the land was rich and the streets were paved with gold. They would start over in America.

Food Fable

RIGÓ JANCSI

(except this one is true)

On Christmas Day 1896, the beautiful blond princess and the dashing, dark gypsy ran away together. Later they were married. A new dish was added to Hungarian cuisine to celebrate this. Like the princess and the gypsy, it was a beautiful, exciting, and rich combination that became an instant worldwide classic. And why not? It's a chocolate sponge layer cake spread with apricot jam, chocolate cream filling, and a chocolate glaze.

ITALY: UNIFIED COUNTRY, REGIONAL CUISINE

> *"Una tavola senza vino é com'una giornata senza sole."* ("A table without wine is like a day without sunshine.")
>
> —Italian saying

In the beginning of the nineteenth century, Italy was eight separate states. One was ruled by Italians, one by the pope; the others belonged to foreign countries. Since the fall of the Roman Empire in A.D. 476, Italy's city-states had been conquered and re-conquered, ruled by French, German, Spanish, Arabs, Byzantine Greeks, and Normans who enriched themselves at the expense of the people, then left. In 1871, Italy ceased being a series of loosely connected city-states and became one country. It was unified politically, but still fragmented culturally. Each former city-state had its own cuisine, culture, and dialect. These differences in Italian were not like the differences in American English, with merely slightly different accents. They used different words. To overcome this, Italy made education mandatory in 1879.

Northern Italian Cuisine

Two years later, the most influential cookbook in Italy was published, *La Scienza in Cucina e l'arte di mangiar bene*—"The Science of Cooking and the Art of Eating Well." It was subtitled *Manuale practico per le famiglie*—"Practical Manual for Families." It reflected the styles and eating habits of the new middle-class city dwellers, especially in the north. This type of Italian cuisine didn't become popular in the United States until the end of the twentieth century, because only twenty percent of the immigrants who came to America at the end of the nineteenth and

beginning of the twentieth century were from the north. Emilia-Romagna has been called the "richest gastronomic region in Italy."[42] This area is rich in dairy farms that produce Parmesan cheese and butter, the main ingredients in Alfredo, the Italian cream sauce. Grains in the north also include rice and corn for risotto and polenta, often to accompany *osso buco*—"bone with a hole"—stewed veal shank. From the seaport city of Genoa comes *pesto genovese*, basil, olive oil, pine nuts, and Parmesan cheese. *Prosciutto di Parma* is a northern Italian ham. Dried sausages like *salame* are also from the north. *Mortadella,* an uncured sausage, is known in the United States by the mangled pronunciation of the name of the city where it is made—Bologna—which Americans call "baloney."

The meal begins with *antipasti*—appetizers—but there is no one main course, as meat often is in an American meal. As cookbook author Marcella Hazan explains: "There are, at a minimum, two principal courses, which are never, never brought to the table at the same time."[43] But this was very different from how the vast majority of the population of southern Italy ate.

Southern Italian Cuisine: The *Mezzogiorno*

The southern half of the Italian boot, the part below Rome, is known as the *Mezzogiorno*—literally, "midday" or "noon"—because it is where the sun shines brightly. In 1806, feudalism ended in Italy but not the extreme class divisions between the minority of upper-class wealthy and the majority who were barely surviving as farmers. Most people in southern Italy lived in a one-room, two-level hut. On the dirt floor on the bottom level lived the animals—a few chickens, maybe a pig for sausage. Up a ladder in a loft was where the family slept. The food was not very different from what Don Quixote and Sancho Panza had in Spain 200 years earlier, or medieval peasants 1,000 years earlier—lentils, bread, onions, maybe some cheese, and fruit. Meat was on the peasant table only twice a year, at the major Catholic holidays—a chicken or capon for Christmas, roast kid at Easter. Pasta, too, was a luxury. Like the Irish peasants or the slaves who did all the work in the American South, southern Italian peasants raised the animals, sowed the seeds, and harvested the crops, but they didn't get to eat them. The food went to the upper classes.

In the cities, it was different. Upper-class cuisine made full use of the bounty for which the *Mezzogiorno* had been famous and fought over since it was settled by the Greeks in the fourth century B.C.—wine, figs, raisins, spinach, citrus fruit, sheep and goat, cheese, olive oil, grain. The sea was rich with *frutti di mare* or seafood, literally, "fruit of the sea"; *calamari* and *polpi*—squid and octopus. By the eighteenth century, Naples had become the pasta capital of the world, with almost 300 pasta businesses. Some of it was sold by street vendors and eaten, in those



Pasta drying in the streets of Naples. *Courtesy Library of Congress, Prints & Photographs Division, LC-USZ62-93348*

long strands, by hand.[44] Sauce made with plum tomatoes, especially from the area of San Marzano, has also come to be identified with southern Italian cooking, although the tomato does not appear in Italian cookbooks until almost 1700, and then the recipe is for "Spanish style" tomato sauce.[45] Pasta was layered with tomato sauce and ricotta cheese and topped with mozzarella to make lasagna, or stuffed with ground meat or ricotta cheese and herbs to make square ravioli or round agnolotti and then covered with sauce. Pecorino cheese is traditionally grated over the top. Meat sauces and meatballs—*polpette*—were reserved for special occasions. Pasta was eaten with peas—*pasta e piselli*; or with beans—*pasta e fagioli*, which became *pasta fazool* in Neapolitan dialect.

Pizza, a round, flat bread with various toppings, is another typically Neapolitan food. The word *pizza* is related to *pita*, and has been used since the tenth century. Neapolitan pizza has a crisp thin crust, while Sicilian pizza has a thicker, more bread-like crust. Simple pizza is dough topped with tomatoes, olive oil, garlic, and oregano. A more elaborate

version is *Pizza Margherita*, created for Italy's Queen Margherita in 1889. It is *tricolore*—"three-colored"—to represent the Italian flag. The tomato sauce is red, the mozzarella is white, and the fresh basil leaves are green. A flat wooden paddle called a peel is used to slide the pizza into a very hot—750°F—brick oven.

Baking in Italy was very connected to religion. Each one of the numerous festivals required its own special breads or desserts. Some holidays were celebrated throughout Italy, like Madonna Assunta, the assumption of the Virgin Mary into heaven, August 13 to 15; and St. Lucia's Day, the Feast of Lights, on December 13 (which Sweden also celebrates; see Sixth Course). Breads in the shape of *ossa di morti*—"bones of the dead"—were baked in honor of the Day of the Dead, November 2. For Easter, a special, rich, yeast-risen egg bread was baked, as well as pies filled with ricotta and rice, barley, or kernels of wheat. Another Easter pie is savory, baked in a crust spiced with black pepper and filled with cubed prosciutto, other meats, cheeses, and an egg binder. But many feast days were for local patron saints. For example, San Maura, the patron saint of people with arthritis and rheumatism, January 15, is celebrated with small breads in the shape of canes.

The pastry and confectionery arts were highly developed in southern Italy because the Arabs cultivated sugar in Sicily since the Middle Ages. Italian sponge cake might originally have been called *pan di spugna* (sponge bread), or it might be Spanish in origin—*pan di Spagna* (Spanish bread). It is deliberately a bit dry and lightly sweetened, so it can be sliced into layers and moistened with liqueurs like rose-scented *rosolio* or Strega, made from herbs and elderberries, and topped with fresh fruit or jam. A more elaborate version calls for the cake to be sliced, drenched in rum, spread with vanilla and chocolate *crema pasticciera* (pastry cream) or ricotta cream, and topped with whipped cream. This is similar to an English trifle, and is called *zuppa inglese*—"English soup"—because of the rum; it needs to be eaten with a spoon. *Zeppole*, fried and filled with pastry cream, are made for St. Joseph's Day on March 19. The technique for making *zabaglione* (now *zabaione*) *marsala* is the same as the beginning of a *semi-freddo*: whisk egg yolks and sugar for several minutes to aerate and thicken. Various areas of Italy (and Europe) make a simple pastry of dough, twisted or knotted, fried, and sprinkled with confectioners' sugar. *Struffoli* are small fried dough balls coated in warm honey and topped with colored sprinkles. Ricotta was also given special treatment in desserts in southern Italy and Sicily.

Sicilian Cuisine

Ricotta means "re-cooked," just as *biscotti* means "twice cooked." Originally made from goat or sheep milk, ricotta was a byproduct from making a sharp, hard, aged Italian cheese, provolone (nothing like the taste-

less round rubber log that is sold as domestic provolone in the United States). Now, ricotta is made on its own. Dried, it becomes *ricotta salata*, tangy and crumbly.

It is used in Sicily's most famous dessert. Cannoli is a study in contrast: a crunchy unsweetened fried pastry tube filled with smooth, sweetened ricotta. Now the dough is wrapped around hollow metal cannoli forms (*cannolini* are the small version), but in the nineteenth century, pastry chefs used *canna*—cane stalks or reeds. Cassata is another Sicilian dessert made with ricotta, a combination of sponge cake and ricotta, wrapped in green-tinted almond paste now, but in earlier times, pistachio paste—a Middle Eastern influence. Cassata can be traced back to the Arab *qas'ah*, the mold that shaped it.[46] *Cassata gelata* is its frozen cousin, which adds layers of three different flavors of gelato.

Culinary Confusion

ICE CREAM AND GELATO

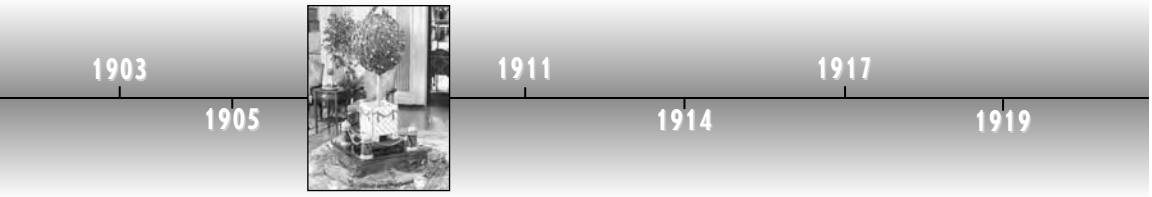
Traditional Sicilian gelato—it means "frozen," like *helado* in Spanish—is different from French and American ice creams. French ice cream is thickened and enriched with eggs. American ice cream—Philadelphia-style ice cream—has more cream than French ice cream, but no eggs. Gelato was originally made with goat's milk, which has more fat than cow's milk but less cream; it was originally thickened with wheat starch, then in the nineteenth century, cornstarch. There are also refreshing ices—*granita*—made with water, sugar, and lemon juice, mulberries, cinnamon, or jasmine flowers.[47]

Sugar is also used in Sicilian main dishes, which can be often *agrodolce*—sour and sweet. Caponata is an eggplant relish made with vinegar and sugar. Sometimes foods are sweetened with orange or tangerine juice, raisins, or currants. Caper berries are common, too. The north African and Arab influence shows in *cuscus*, the use of rice, spinach, and the many dishes with chickpeas. From the sea come swordfish, sardines for stuffing, and tuna and anchovies for pasta sauce. Again, these were upper-class foods. The American ex-slave Booker T. Washington visited Sicily and was shocked at the lives of the peasants:

> The Negro is not the man farthest down. The condition of the coloured farmer in the most backward parts of the Southern States in America, even where he has the least education and the least encouragement, is incomparably better than the condition and opportunities of the agricultural population in Sicily.[48]

In the early 1890s, successive years of drought damaged the grain, grape, and citrus crops in Sicily, and phylloxera wiped out vines throughout the *Mezzogiorno*. But hunger was not the only thing that drove forty percent of Sicily's population away. Lack of industrialization and sanitation also played a part. A government that demanded seven years of service in the armed forces, that turned troops loose on its citizens with orders to arrest anyone with "the face of an assassin," 20,000 deaths from malaria every year, and American industrialization that undercut the price of sulfur, Sicily's chief export, all churned up the idea of leaving. Finally, three years of cholera epidemics in the mid-1880s that killed 55,000 people, and volcanic eruptions and a tidal wave that killed 100,000 more in 1908 seemed like signs from God to the 1.5 million people who decided, weeping and cursing, that leaving Sicily was the only way they could survive.[49]

They would go to a new place, where the land was rich with food and the streets were paved with gold. They would start over in America.



Tenth Course

The Purity Crusade, *Cuisine Classique*, and Communal Food: THE EARLY TWENTIETH CENTURY IN EUROPE AND THE UNITED STATES

By 1900, a little more than a century since breaking away from England, the United States had become a world power. From a late start in the Industrial Revolution, American factories were now outproducing England, Germany, and Belgium—the countries where industrialization had begun—*combined.* American beef and wheat were feeding the world. America had many millionaires, and in 1901, its first billion-dollar corporation, United States Steel. The new industrial giant was built in great part by immigrant labor.

THE NEW IMMIGRANTS AND THE MELTING POT

They came to America by the millions—26 million between 1870 and 1920.[1] They were Italians, Poles, Hungarians, Greeks, Lithuanians, Jews, Czechs, Rumanians, Russians, and others. They arrived at Ellis Island in New York Harbor with few possessions and almost no money—

the average male had $17.[2] So they stayed where they landed, swelling the cities on the east coast—New York, Boston, Philadelphia—to bursting. In addition to these millions of immigrants with strange food, languages, clothes, and customs, Americans were leaving their farms and moving to cities to work in factories. New York City became the most densely populated place on earth.

Italian-American Cuisine

"Not yet Americanized. Still eating Italian food." The late-nineteenth-century female social worker who wrote this might have been referring to macaroni, which horrified meat-and-potatoes-eating Americans. If the pasta wasn't bad enough, that sauce of olive oil and garlic and tomatoes would surely kill you. And pizza—that same tomato sauce, but on bread. Only one thing could make it worse—fry the bread dough, then ladle tomato sauce on top and sprinkle it with cheese. The name said it all: *pizza fritta*—"fried pie." And when their babies teethed or had colic, these people rubbed wine on their gums or even gave them a sip. Italians would never become real Americans or understand American food.

Usually, the Italian men came to America first. They learned to cook or found rooming houses run by other Italians where they got meals. For about fifty percent of the Italians, the trip to America was temporary, a way to make the money they needed to return to Italy and buy land or open a small business. Others sent for their wives and families later.

As Italians became more prosperous in America, these women who could make a meal out of very little in the old country found they had a great deal to work with in the new one, especially meat. On Sundays and holidays, after the pasta course, there might be a special tomato sauce with meatballs, sausage, pork spareribs, and braciola—flank steak sprinkled with salt, pepper, Parmesan cheese, chopped garlic, parsley (and fresh basil in season), rolled and tied with string, browned in olive oil and garlic, then simmered in the sauce. Mothers taught daughters to cook without recipes, just by feel. They avoided cooking classes. The second generation, the children of the immigrants, who went to American schools and learned to read and write English, began to figure out the measurements and write recipes down. The Christmas and Easter traditions of making mountains of pastry, sweetened egg bread, and ricotta pies to offer to the relatives and friends who dropped by continued. So did the festivals that reinforced the immigrants' sense of community in their new country, like the Feast of San Gennaro.

However, Italian immigrants, with one foot in Italy and one in America, celebrated holidays with the cuisines of both countries. On Thanksgiving, Italians ate soup, lasagna, meatballs and sausage, and Italian bread. *Then* they ate the full American Thanksgiving dinner with turkey;

Holiday History

SAN GENNARO IN NEW YORK'S LITTLE ITALY, SEPTEMBER 12—22

The *festa* of San Gennaro is the largest Italian-American celebration in the United States. San Gennaro, the patron saint of Naples, was decapitated on September 19, A.D. 305, for believing in Christ. The street fair began in New York's Little Italy in 1926. Now it takes place from September 12 to 22 every year (except 2001, when it was canceled because of September 11). More than a million people turn out to watch the religious processions as the statue of San Gennaro is paraded down Mulberry Street, and to buy Italian food—especially sausage and pepper submarine sandwiches—from more than 300 street vendors. In 2002, a cannoli-eating contest was added.

cranberry sauce; stuffing made with Italian bread, Italian sausage, and giblets; mashed potatoes; and sweet potatoes. There would also usually be an Italian vegetable like broccoli with olive oil, lemon juice, and garlic. The salad of fresh greens came last, as it had in Italy, followed by fresh seasonal fruit like pomegranates, pears, and tangerines. Then came American pumpkin pie and apple pie; and finally, in the Italian tradition, a bowl filled with walnuts, almonds, and dried figs to munch on. For Italians and Italian-Americans, Thanksgiving was a traditional Italian holiday meal with a traditional American holiday meal sandwiched in the middle.

Jewish-American Cuisine

Many foods that Americans think of now as typically American, or typically New York, originated with the two-and-a-half million Jews who migrated from eastern Europe. Jews settled on New York's Lower East Side, the alphabet avenues—A, B, C, D—around First Avenue. Like the Irish and the Italians, the Jews took advantage of the abundance of food in America to develop their own cuisine and cook every day the food that had been reserved for holidays or for the upper classes in Europe. Noodles and dumplings like kreplach and knishes could be filled with meat in addition to the traditional potatoes. Chicken soup, bagels, bialys, lox and cream cheese, sour cream, cheesecake, borscht, and gefilte fish could be eaten often. German Jewish delicatessen food, heavy on meat—kosher sausage, salami, pastrami—became the new tradition for all

Jewish immigrants. Delicatessens called "appetizing" stores sprang up in the New York Jewish community.

Jewish women, responsible for food preparation, demanded high-quality food and boycotted and demonstrated when they didn't get it. American food companies advertised in the Yiddish press; some, like Heinz, even started producing kosher foods. These people who had known starvation in the old country pushed food on their children. Rabbis and the Yiddish press reminded Jews to observe the dietary laws, because temptations to eat outside the culture were everywhere. Some Jews were curious, especially those who worked closely with Italians. Jewish children were exposed to the foods of Americans and of other immigrants at school.[3]

Cookbooks written by Jewish women or by settlement houses—places the immigrants could go to learn how to settle into the United States—helped the Jewish community learn how to use the resources available to them. The first one was published in 1901 by Lizzie Black Kander. *The Settlement Cookbook: The Way to a Man's Heart*, had Jewish and non-Jewish recipes. Unlike Italian women, Jewish women eager to improve their skills signed up for free cooking classes provided by local governments and charities.

Greek-American Cuisine

The Greeks, too, came from a life of extreme poverty in Greece, where they slept on sheepskins on the floor, subsisted on beans and a little olive oil, and had few possessions. They came looking for work on the railroad, the factories, the mines. Like the Italians, bread was sacred to the Greeks. If you dropped it on the floor, you picked it up and made the sign of the cross and ate it. You never threw it away. Women were the cooks, but men roasted lamb on a spit, taking turns squatting on the ground to turn it constantly.[4] Families observed the religious holidays, especially Easter:

> Fasting began in earnest for us two weeks before Easter. Neither fish, poultry, nor meat could be eaten because of the blood in them, in memory of Christ's shedding His blood. Nor was anything that came or was made from blooded animals allowed: milk, eggs, cheese, yogurt. Many households lived on beans, lentils, and greens, and some mothers would not use olive oil for taste because it was holy. Our food was bread, pickled peppers, squid with rice, spinach with rice, beans with rice, and, for something sweet, halvah. Between meals we munched on salted, dried chick-peas.[5]

The Easter fast was broken with roast lamb and Greek Easter bread, which, like the other European Easter breads, is sweet and rich with eggs and butter, and has colored hard-boiled egg(s) baked into the top. Other sweet breads can be braided, like Jewish challah.

Other traditional Greek dishes are *avgolemono*—chicken soup with rice and lemon, thickened with egg; *skordalia*—garlic, mashed potato, and almond sauce; dolma—stuffed grape leaves; moussaka—like lasagna, but with layers of eggplant instead of pasta in tomato sauce and béchamel; and Greek salad, which has tomatoes, cucumbers, onions, green bell peppers, black olives, and feta cheese, but not lettuce. Common vegetables are eggplant, spinach, artichokes, and potatoes. After lamb, fish and seafood are main courses, either sprinkled with olive oil, lemon, and oregano and baked, or fried in olive oil. Rice pilaf and noodles are the starches, along with potatoes. The signature herb is dried oregano.[6]

The Greek immigrant women, like the Italian women, had very long hair that they wore in a knot at the nape of the neck. After they arrived in America, many cut their hair short, even against the wishes of the men, in the American fashion—a symbol of assimilation. Perhaps it helped to ease the terrible homesickness for their native land.

The Greek men spent their evenings as they had in Greece—in coffeehouses, dressed in their good clothes, smoking, talking politics, playing cards, and either reading the Greek-language newspaper or, if they were illiterate, listening as it was read. The coffeehouse was also the bank and post office: "The men left their savings with the *kafejis* (coffeehouse owner) when they went away in search of work, and they had their mail sent in his care." But they did new things, too, in the coffeehouses in America—study Greek-American dictionaries, learn how American laws worked, and how to pass the test to become an American citizen. "Of the three early institutions—coffeehouses, Greek-language newspapers, and churches—the coffeehouses came first."[7]

Church functions are still the occasion for the women to pitch in and prepare world-class Greek-American food in enormous quantities: baklava, *diples* (honey rolls), *kourambiedes* (powdered butter cookies), and *paximathia*—Greece's answer to biscotti.

Polish-American Cuisine

Another group with a strong culinary tradition, Poles, settled in the Midwest, especially Chicago, Illinois, and Milwaukee, Wisconsin. Like the Italians and Greeks, the Poles who came to the U.S. from 1880 to 1920 were poor people who brought a rich cuisine that they were finally able to afford and enjoy. Poland, located between Germany and Russia and at various times part of both, shows those influences in its cuisine. The most famous Polish dish is a stew called *bigos,* or hunter's stew.

Less complicated and more common Polish dishes are made from cabbage, cauliflower, Brussels sprouts, and root vegetables like celery root, parsley root, and carrots. Caraway and dill are the signature spice and herb. Dill pickles are used as seasoning. Mushrooms are often combined with sour cream in fillings or patties; fruit soups are made of berries or stone fruits

INGREDIENTS:

Bigos

Polish Hunter's Stew

Heavy with freshly killed meat, *bigos* was traditionally served to royalty after the hunt. Today, it is made with all of the following meats in one stew: beef, lamb, pork, venison or hare, chicken or duck, ham, sausage, and veal. Onions and sauerkraut provide tang, Madeira makes it mellow, roux is the thickener. It is made in large quantities, and is very time-consuming, since each meat is first cooked separately.

like apricots and plums. There is even a beer soup, spiced with cinnamon, thickened with egg yolks, and boosted with rum. The French influence shows in pastry and quenelles, even in the dough for Russian-style pierogi, filled with meat or cabbage. The Polish version of *kulebiak* is less complicated, with fewer layers. Organ meats and brains appear in soup, pâté, and as filling for crepes. The Ukrainian beet soup, borscht, becomes Polish *barszcz*. Polish-Americans still celebrate their cuisine and culture today.

Holiday History

POLISH FEST

America's largest Polish festival is the Milwaukee, Wisconsin, Polish Fest. For three days in June, thousands of people feast on Polish, German, and other European specialities. *Feinschmeckers* (gourmets) will be glad that *wurstmachers* (sausage makers) have been busy turning out more than seventy varieties of sausage—bratwurst, bierwurst, knockwurst, yachtwurst, wieners, liver sausage, braunschweiger, salami, bologna, German-style mortadella with pistachios, and summer sausage—along with pastrami, ham, smoked pork butt and shoulder, and bacon. Beer is the beverage of choice, to quench the thirst from sausage and nonstop polka dancing. See www.polishfest.org for more details.

In cities, food distribution became mechanized. Horn & Hardart had a chain of automats. Putting coins in a slot opened the latch on a little

door so customers could pick the food they wanted, visible behind glass in vertical cases.

PROGRESSIVES AND THE PURITY CRUSADE

The Progressive Era, approximately 1901–1920, like Reconstruction, was a time of intense, profound political and social change in America. It crossed party lines, from Republican presidents Theodore (Teddy) Roosevelt and Taft to Democrat Woodrow Wilson. Three events occurred in the United States in 1903 alone that took industrialization to new heights and changed the world forever: (1) in Detroit, Henry Ford produced the first car with a gasoline combustion engine; (2) in Kitty Hawk, North Carolina, the Wright brothers flew the first airplane; and (3) in Hollywood, *The Great Train Robbery*, at twenty minutes long, the first movie that told a full story, was released.

Reacting to the changes brought about by industrialization, urbanization, and immigration, the Progressive reformers, middle-class men and women from all parts of the country, wanted to clean up democracy, the food supply, and human behavior. This is reflected in four Constitutional amendments: in 1913, the sixteenth amendment created an income tax, and the seventeenth took the election of senators away from state legislatures and put it in the hands of citizens directly. In 1919, the eighteenth amendment made alcohol illegal, and the nineteenth gave the vote to the last group of Americans that still had no voice—women.

The Progressive buzzword was "pure"—pure food, pure living, pure morals. Progressives felt that American morals were eroded by young women going out to work in factories and offices, and unscrupulous businessmen polluting the food supply. They weren't paranoid, as the adulteration chart on the next page shows.

So-called medicines weren't any better. Over-the-counter syrups—called "soothing" or "quieting"—soothed and quieted because they contained cocaine and/or opium, and sometimes as much as twenty-three percent alcohol. Take four times a day.[8] The public outcry for change was deafening. Some states passed laws, but the problem was countrywide. Progressives wanted the federal government to step in. They found a champion in the chief of the U.S. Department of Agriculture's (USDA) Bureau of Chemistry and his very public approach to the problem.

The Poison Squad

Dr. Harvey Washington Wiley was a one-man crusade against adulterated food. As the USDA was structured then, Wiley was prosecutor, judge, and jury in cases where food was suspected of being contaminated. This

ADULTERATION[9]

Product	Adulterated with:
Beer	glycerin, grape sugar, tannin, salicylic acid, bicarbonate of soda, valerian to "'stupefy' the drinker and prevent vomiting."
Brandy	sour wine
Bread	adulterated flour, ashes, copper sulfate
Butter	lard, vegetable fat, starch
Canned foods	copper, tin, chemical preservatives
Cayenne Pepper	red lead, iron oxide, rice flour, salt
Cheese	mercury salts
Cigarettes	"tobacco and cigar butts picked up from the streets," tree bark, opium
Cocoa/Chocolate	iron oxide, animal fats, dye
Coffee	chicory, acorns, shells, burnt sugar, beans, peas
Flour	sand, plaster of paris, ground rice
Fruit Juices	salicylic acid, artificial flavoring
Ginger	cayenne pepper, mustard, turmeric
Lard	caustic lime, alum, starch, cottonseed oil, water
Milk	water, burnt sugar, yellow annatto and aniline dye, formaldehyde, borax, nitrates, dirt, manure, urine, bacteria
Mustard	lead chromate, lime sulfate, turmeric, flour
Pepper	mustard, flour, nut shells
Pickles	alum, apples, flour
Vinegar	sulfuric acid, hydrochloric acid, burnt sugar

made him the darling of women's groups across the U.S. and the fly in the soup for food producers. Wiley was going to do experiments to prove that adulterated food damaged health:

> The experiments involved setting up a kitchen and dining room in the basement of the chemistry building of the Department of Agriculture, recruiting 12 healthy young male employees to undergo a series of tests, and undertaking extensive laboratory measurements.[10]

Newspapers christened the young men "The Poison Squad." Wiley patterned his "experiments" on those done by U.S. Army Surgeon Walter Reed, who had just proved that a mosquito transmits yellow fever. Previously, it was thought that yellow fever could be caught by contact with contaminated utensils, soiled bedding, clothing, etc.—called fomites

(FOE mites)—that had been used by yellow fever patients. But Reed had put young men (army "volunteers") in rooms to live with the fomites, and they hadn't gotten sick. Wiley was going to do the same, to prove that preservatives were bad for health. He fed the young men food with formaldehyde, alum (which is in baking powder), and sulphurous acid, among other things. But these experiments were not very scientific. He had no norm, no control group—men who *weren't* eating preservatives—to compare them with. What Wiley really wanted was a ban on Coca-Cola. But Americans were more concerned about contaminated bread and meat.

The Basement Bakers: Labor Unions and the *Lochner* Case

Contamination of the bread supply was of great concern to Progressives. In 1894, the *New York Press* printed an editorial about the horrendous working conditions of bakers. American food professions still operated like medieval guilds: journeymen bakers worked more than 100 hours a week, usually in extremely unhealthy conditions in primitive cellars. They worked at night, breathed in flour dust, and had a lower life expectancy than other workers: "most of them dying between the ages of forty and fifty."[11] In 1897, the state legislature unanimously passed the New York Bakeshop Law, which limited the number of hours a baker could work to ten per day or sixty per week. It required "all buildings or rooms occupied as biscuit, bread, pie, or cake bakeries" to have ceilings at least eight feet high; floors of cement, tile, or wood (meaning not dirt); walls of plaster or wood (meaning not dirt); "air shafts, windows, or ventilating pipes"; drainage and plumbing; and a bathroom separate from the food prep and storage areas. It also stated, "No person shall sleep in a room occupied as a bake room," and barred all domestic animals except cats from bakeries, indicating there was a rodent problem.[12] In 1905, the U.S. Supreme Court overturned the section of the Bakeshop Law that limited working hours. The ruling in *Lochner v. New York* stated that the government had no right to interfere with business. For the next thirty-two years, until it was overturned in *West Coast Hotel Co. v. Parrish* in 1937, the *Lochner* decision blocked attempts to improve working conditions in any profession.

But what the bakers couldn't get by law, they got by bargaining. In 1912, union bakers in New York City negotiated their work day down to ten hours. The men in the food trades might not have been successful in their bid for better working conditions if it hadn't been for the almost 200 teenage girls who burned alive or jumped to their deaths in 1911 when a fire swept through the Triangle Company clothing factory where they worked. The girls had been locked in to keep union organizers out. As a result, New York State launched a four-year investigation that aimed to improve working conditions in all industries.

The Meat Packing Industry and *The Jungle*

In 1905, the same year as the *Lochner* case, a stomach-turning story about the meat processing industry appeared in a series of magazine articles. Upton Sinclair's book, *The Jungle*, was the caboose on the train of events that led to the passage of the Meat Inspection Act in 1905 and the Pure Food and Drug Act in 1906. Women's groups had been lobbying for years for laws to clean up the food supply. During the Spanish-American War in 1898, young men in the prime of life had died from eating bad food, canned meat they called "embalmed beef." The process that began with Napoleon and Appert to guarantee safe food for the army was used to pawn off rotten food that the corporate giants couldn't sell anywhere else. Americans were outraged. They were further outraged when Sinclair described meat packing plants where animal blood flowed in rivers; food and humans were covered with flies; workers fell into vats and were processed as lard; rat feces, rat poison, and dead rats ended up in sausage along with rusty, filthy water from garbage cans; and chemicals made rotten, contaminated meat odorless and healthy looking. Sinclair wrote the book to show the terrible working conditions of the immigrants—his main characters are a Lithuanian family in Chicago—but readers panicked over what was being done to their meat. Sinclair said, "I aimed at the public's heart, but I hit its stomach." In an unprecedented display of power, the federal government stepped in and began to regulate the country's meat and food processing plants. The public called it "Dr. Wiley's Law."

United States v. Coca-Cola—Caffeine on Trial

In 1911, Wiley finally succeeded in bringing Coca-Cola to trial on two grounds: misbranding—because it *didn't* contain cocaine, which the label implied (it had been removed by 1902)—and fraud—because it *did* contain caffeine, which the label omitted. If it had contained cocaine, it would have been illegal. No problem—consumers sprinkled cocaine powder into their Coke. But Wiley's pet peeve was that Coca-Cola consumption was so widespread in the South that even children had the "Coca-Cola habit"—as in drug habit. He believed their parents had a right to know it contained caffeine; Southerners generally were portrayed as addicts. Wiley's moral crusade against Coca-Cola was so successful that the U.S. Army banned it in June 1907—but reinstated it in November. Soldiers had used Coca-Cola in two ways: mixed with whiskey in a highball, and as a hangover cure.

The trial, which began fifty years almost to the day after the Civil War started, reflected the North-South split that was still an open wound. Coke was a Southern company, Atlanta-based, on trial in a Southern city, Chattanooga, Tennessee. During the Civil War, Chattanooga was the rail

center for the South—until Sherman cut it. Wiley had served with Sherman, and Wiley's boyhood home had been a stop on the Underground Railroad. The jurors stayed in a hotel owned by a Coca-Cola executive. The judge ruled that Coke was not misbranded, but Coke eventually reduced the caffeine content. It also changed its marketing to make sure that no child under twelve was shown drinking it. (That policy went out the window in 1986.) Wiley retired from the USDA a year after the trial began.[13]

Efficiency Experts and Domestic Science: Ellen Richards

At the end of the nineteenth century and the beginning of the twentieth, efficiency became almost a new religion. Scientists, engineers, and efficiency experts like Frederick Taylor, and Frank and Lillian Gilbreth, were the saviors of time—and therefore of money. They believed everything could be measured, and the measurements used to improve society. They used standardized tests, like the I.Q. (Intelligence Quotient) test, to measure human potential. Recently, scientists taught sign language to Koko, a gorilla. Then they gave Koko a standard I.Q. test. Normal human I.Q. is between eighty-five and 115. Koko scored ninety-five points, and would have scored higher but the test was culturally biased against gorillas. It was a food question that tripped Koko up: "Of the following five things, which two are good to eat? 1. a flower; 2. a block; 3. an apple; 4. a shoe; 5. ice cream." Koko picked flower and apple, but the correct answers were apple and ice cream. However, a case could be made for Koko's choices, especially now when edible flowers are not unusual in salads and soups.[14]

Ellen Richards, a graduate of Vassar, was the first woman to get a Ph.D. from MIT, the Massachusetts Institute of Technology. In 1870, she had to enroll as a special student because no woman had been there before. She proceeded to use her knowledge about chemistry to improve the lives of the women who managed households, and to teach them to identify adulterated foods. She published many books about sanitation and nutrition, in addition to cooking. Her first book was *The Chemistry of Cooking and Cleaning*. She spearheaded a movement to teach women the cutting scientific edge of food preparation and housekeeping, because with good household help hard to find, many more women were having to do these things themselves with the help of the new electric appliances. Women formed organizations to spread this information, like the Cooking Teachers' League and the National Household Economic Association. Ellen Richards was president of the American Home Economics Association until 1910. By then, the new profession of domestic science was firmly established.[15]

The efficiency movement in the kitchen included a new kind of cabinet that stored pots and pans, serving pieces, spices, had bins for flour,



McDougall Kitchen Cabinets

are designed expressly for the convenience of the woman who does kitchen work.

Every article needed in cooking, baking, or the preparation of any meal, including the food supplies, can be kept in a McDougall Kitchen Cabinet, where it is within instant reach of the hand without the taking of a single step. You can get one

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The Ideal Christmas Gift for Wife or Mother

Write today for our handsomely illustrated catalogue, showing the different styles, that will enable you to quickly ascertain the particular cabinet your wife or mother would like to have, ranging in price from $15.75 to $54.00, that you can order it for Christmas from your dealer without her knowledge.

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In answering this advertisement it is desirable that you mention MUNSEY'S MAGAZINE.

A 1905 ad for McDougall Kitchen Cabinets. *From Munsey's Magazine*

and a large work surface. Invented in Indiana, they were generically called Hoosiers, after the state nickname, although many companies made them.

Ellen Richards was just one of the many women who crusaded for change. Anna Jarvis, a West Virginia woman, was responsible for creating a new holiday to honor mothers in the United States.

Holiday History

MOTHER'S DAY
THE SECOND SUNDAY IN MAY

Mother's Day is the most popular day to eat out in America.[16] It came about because Anna Jarvis vowed to fulfill her mother's wish to have one special day set aside to honor every mother "for the matchless service she renders to humanity in every field of life." Anna's mother, also named Anna Jarvis, spent her life in service to others. Before the Civil War, she initiated Mothers Day Work Clubs to try to remedy the high infant mortality rate caused not just by disease but also by poor nutrition and sanitation—seven of her eleven children died in childhood. During the Civil War, the mothers clubs shifted to nursing injured soldiers, regardless of which side they were fighting for.

After Anna Jarvis died in the second week in May 1905, her daughter began a letter-writing campaign to state and federal legislators and other prominent people to make Mother's Day a national holiday. She handed out white carnations, her mother's favorite flower, now the traditional Mother's Day flower. In 1914, Congress passed a resolution making it a national holiday, and President Woodrow Wilson issued a proclamation. The Mother's Cookies Company began the same year and continues today. Songs celebrating mothers soon followed, as did advertising from florists and greeting card companies. Anna was horrified at the commercialization. The church where Anna Jarvis worshiped, Andrews Methodist Episcopal Church in Grafton, West Virginia, built in 1873, is now the International Mother's Day Shrine.

Brunch

Brunch, a traditional way to celebrate Mother's Day, is purely an American invention. The word *brunch*—a combination of *breakfast* and *lunch*—was not even in the Oxford English Dictionary until recently, although it was in American dictionaries. It originated during the Gilded Age in nineteenth-century America, when women began having "Breakfast Parties."

Brunch is an opportunity for chefs to go past the customary breakfast and lunch foods to quiche, seafood Newburg, frittatas, and even more elaborate creations. In Kennebunkport, Maine, chef Christian Gor-

don at Federal Jack's has revamped a Delmonico's invention from the 1920s, eggs Benedict—an English muffin topped with ham, poached eggs, and hollandaise sauce—into a croissant topped with poached eggs, lobster, and hollandaise. Mother's Day brunch at the elegant Raffles Hotel in Singapore has featured a salmon station, a carving station, and a "Live Station" with pan-fried foie gras with rhubarb grenadine compote and Old Port Wine jus.

RECIPE:

Claire Criscuolo's Squash Blossom Pancakes

Serves 6 (makes about 32 pancakes)

2 cups unbleached all-purpose flour
2 teaspoons baking powder
3 eggs
1 cup water
8 to 10 squash blossoms, rinsed and coarsely chopped
¼ cup finely chopped flat-leaf parsley
Salt and pepper to taste
½ cup olive oil

1. Measure the flour and baking powder into a large bowl. Stir to combine. In a separate bowl, whisk together the eggs and water. Add the egg mixture to the flour mixture all at once, using a rubber spatula to scrape out the bowl. Stir to combine.
2. Add the squash blossoms, parsley, salt, and pepper to the batter. Stir well to combine.
3. Line a cookie sheet with a double layer of paper towels and set it by the stove. Heat 3 tablespoons of the oil in a large nonstick skillet over medium heat. Drop heaping teaspoons of the batter into the hot oil, fitting as many as you can without crowding. Cook for 2 to 3 minutes, or until the undersides are medium golden brown. Turn and cook the other sides for about 2 minutes, or until medium golden brown. Transfer to the towel-lined cookie sheet.
4. Continue frying the remaining batter, heating additional oil as needed. Serve hot, at room temperature, or chilled.

From *Claire's Italian Feast* by Claire Criscuolo, chef-owner of Claire's Corner Copia, New Haven, CT (www.clairescornercopia.com).

Brunch is also an excuse to start drinking early in the day. A traditional brunch drink is the mimosa, made with Champagne and orange juice. The Mimosa Royale adds Chambord. At the Kapalua Bay Hotel in Hawaii, mimosas also come in Tropical (Champagne, peach schnapps, and orange juice); Strawberry (Champagne and strawberry juice); and Plumeria Terrace (apricot brandy and orange juice). Other traditional brunch drinks are the Bloody Mary—vodka and tomato juice—and its nonalcoholic cousin, the Virgin Mary.

Fathers demanded equal time, and Father's Day began to be celebrated unofficially. In 1966, President Lyndon B. Johnson made it official when he declared Father's Day, the third Sunday in June, a national day.

Guess Who's Not Coming to Dinner?

President Theodore Roosevelt didn't understand the public's reaction. He had simply invited a great American leader to dinner. Except that the leader was black—Booker T. Washington, the former slave and founder of the Tuskegee Institute in his native Alabama. Senator Benjamin Tillman of South Carolina said, "The action of President Roosevelt in entertaining that ni___r will necessitate our killing a thousand ni___rs in the South before they will learn their place again."[17] When Ida B. Wells, a black Southern journalist, wrote articles against lynching, she got out of the South one step ahead of the lynch mob herself. W. E. B. Du Bois (doo BOYCE) became the first African-American to earn a Ph.D. from Harvard and was one of the founders of the NAACP (National Association for the Advancement of Colored People) in 1910.

Then Woodrow Wilson, the son of a minister, former president of Princeton University, and the Progressive governor of New Jersey, was elected president in 1912. His high moral ground appealed to many voters, but Wilson was from Virginia. He segregated the White House, installing separate drinking fountains, bathrooms, and cafeterias. The rest of the government followed suit. For the next twenty years, until President Franklin Delano Roosevelt and his wife Eleanor moved there in 1933, the only blacks in the White House were the kitchen help.

DINING *DE LUXE* IN THE BELLE EPOQUE

Escoffier and Ritz: *Cuisine Classique* and the Grand Hotels

Auguste Escoffier, "the king of chefs and the chef of kings," never wanted to be a cook. Like Carême, he wanted to be an artist, a sculptor. He was born on October 28, 1846, in the south of France. At the age of thirteen, he became an apprentice cook in a restaurant owned by his uncle

in Nice, the Restaurant Français. His brilliance was noticed and when his apprenticeship was over, he was presented with the dream of every cook in the provinces: a job in Paris. He went. After the Franco-Prussian War in 1870, Escoffier returned to Paris.

At a time when deluxe grand hotels were being built all over the world to cater to wealthy travelers, the meeting of Escoffier and Cesar Ritz changed the food and hotel industries forever. The Savoy Hotel in London was built with American hotels as a model and to rival them in attracting wealthy patrons. Americans invented the electric light and the telephone and expected these things when they traveled. Always looking for a shortcut, Americans also invented the shower, known then as the "shower-bath," and really liked indoor plumbing. Ritz understood this; his hotel reflected it.

Escoffier invented new dishes, many named after famous people, usually women. For example, *Pêches Melba* (Peach Melba) was named after the famous Australian opera singer Nelli Melba. Originally, the dish was too complicated and might not have caught on, but Escoffier replaced an elaborate ice swan and spun sugar sculpture with a raspberry sauce, and it became a hit. Other dishes were named after princesses and the actress Sarah Bernhardt, who became a personal friend of Escoffier; she sent him a heartfelt note of sympathy when his son was killed in World War I.

Escoffier Organizes the Kitchen: The Kitchen Brigade

Escoffier made the second great step to standardizing French cuisine. Just as Carême organized the sauces, Escoffier organized the kitchen. The man who was born in the nineteenth century and trained in a medieval system of apprenticeship brought twentieth century methods of organization to the kitchen. The Kitchen Brigade was a military-style chain of command from the top to the bottom. The chef is in charge of food production. He or she plans menus, decides what food and supplies need to be ordered, determines costs of menu items, and plans work schedules. In some large establishments, the chef's duties are more administrative and creative, so the sous chef (*sous* means "under" in French, pronounced "soo") supervises the kitchen and the staff. Each area of food production has a station chef or *chef de partie*. The *chefs de partie* sometimes have assistants, called *commis*. The *tournant*—"swing cook"—fills in as needed. The *aboyer* (literally, "barker") calls out the orders. Depending on the size of the establishment, the Kitchen Brigade can be expanded or condensed.

The organizational model of the Kitchen Brigade has been used for a brigade for the front of the house, supervised by the *maître d'hôtel* or the host who greets the customers. The wine steward controls the house wine stock, list, and table service. The head waiter supervises the waitstaff.[18]

THE KITCHEN BRIGADE[19]

CHEF

SOUS CHEF (UNDER-CHEF)			**PÂTISSIER (PASTRY)**	
Chefs de Partie (Station Chefs)			Confiseur (candy)	Boulanger (baker)
Saucier (sauces)	Poissonier (fish)	Rôtisseur (roasting)	Glacier (cold desserts)	Decorateur (specialties)
Grillardin (grilling)	Friturier (frying)	Entremetier (hot appetizers)		
Potager (soup)	Legumier (vegetables)	Garde Manger (pantry-cold food)		
		Boucher (butcher)		

Escoffier Organizes the Cooking: *Le Guide Culinaire*

"I wanted to create a useful tool rather than just a recipe book"[20]

In 1903, Escoffier published his massive book, *Le Guide Culinaire—The Culinary Guide.* It does not just tell *how* to cook foods, but *why*, and in detail. With 5,000 recipes, it has stocks, roux, and sauces, the bases of French cuisine, first. Then garnishes, soups, hors d'oeuvres, eggs (202 recipes), fish, meat, poultry, and game. One separate chapter is about roasting; Escoffier had held the difficult position of *rôtisseur*, or roasting chef. This was a real juggling act. The chef had to constantly turn a giant spit over an open fire with different kinds and cuts of meat and poultry on it and make sure that they all cooked to exactly the right degree of tenderness at exactly the right time. He recommends which cuts of meat are best for formal presentation, like beef ribs (which need a trained carver); and which ones are suitable only for the family table, like pork shoulder. Like Hannah Glasse 150 years earlier, he advises tearing the ears of a hare to determine its age (the younger, the easier to tear); and warns about English puddings and meat pies because once they are assembled, nothing can be done to correct the seasoning or any mistakes. He instructs that poultry and game should be barded—partly covered with thin slices of salt pork or pork fat—to retain moistness while roasting. He puts the nail in the coffin of some older ways of presentation: "The Medieval way of decorating roast game birds with their feathers has fallen into disuse."[21]

Escoffier is also very concerned with safety. His section on deep frying recommends using beef kidney fat but not mutton fat, because it froths up and might overflow. (He also doesn't like the taste, unlike Middle Eastern cooks, who prize it.) It is also crucial to have equipment that

is easy to use and not defective. Although he does not come out and say so, it is clear that Escoffier has witnessed some terrible kitchen accidents and is very protective of his kitchen staff.

"Where Ritz goes, we go!"—The Prince of Wales[22]

The Prince of Wales, the future King Edward VII of England, was an admirer of Escoffier and made the Savoy *the* place to go. He was also the undoing of Ritz. The coronation was going to be the most important event ever held at the Savoy. The driven, perfectionist Ritz planned for months so that every detail would be flawless. Two days before the coronation, Edward developed appendicitis and the coronation was postponed. The effect on Ritz was nearly fatal. He didn't fall on his sword like Vatel, but he went into shock and had a complete emotional breakdown. He never worked in a hotel again. The man who brought electricity and private indoor plumbing to hotels, who elevated a chef to management for the first time, who always made sure that everything ran smoothly, who could fix anything, couldn't be fixed. He died sixteen years later, alone in a sanitarium in Lausanne, Switzerland, not far from where he was born and where he had made his brilliant beginning.

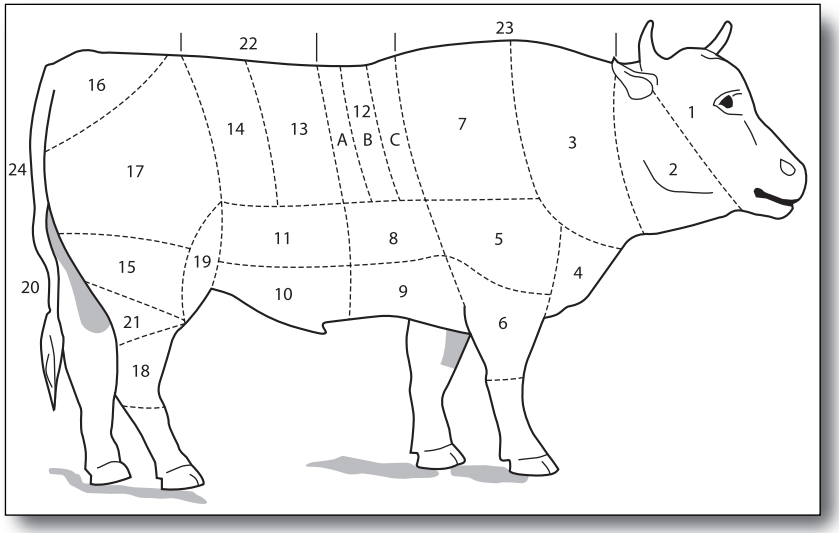
"The Paris of the West" and the Escoffier of the West

San Francisco, California, wanted to become "the Paris of the West," and they had a chef who fancied himself the Escoffier of America—chef Victor Hirtzler of the Hotel St. Francis. He was born in Strasbourg, apprenticed at thirteen, trained at the Grand Hotel in Paris, and served as food taster to Czar Nicholas II of Russia. On April 18, 1906 at 5:13 a.m., the St. Francis and the Fairmont hotels rode out the great San Francisco Earthquake, 8.3 on the Richter scale, with some cracking and buckling. The kitchens were open, serving thousands of hotel guests and displaced San Franciscans and visitors, including opera singer Enrico Caruso and actor John Barrymore. But they couldn't withstand the fires that erupted all over the city when the gas lines ruptured and the water ran out. The two-year-old St. Francis Hotel was completely destroyed.

Two years later, the new St. Francis opened on the same spot with Hirtzler still the chef. In 1910, he published his own book of recipes, *L'Art Culinaire*. In 1919, it was expanded and set in a day-by-day format: breakfast, lunch, and dinner 365 days of the year. Hirtzler was clearly competing with Escoffier. Like *Le Guide Culinaire*, *L'Art Culinaire* contained 202 recipes for eggs. It, too, had recipes for calf's brains, sweetbreads, foie gras, truffles, tongue, lobster, lamb kidneys, rooster combs, and oxtails. But Hirtzler also specified American foods: California oysters, California raisins, California artichokes, avocados (called "alligator pears"); Alaska black cod, reindeer. Most of Hirtzler's dishes reflect his

classical French training, like puff pastry, sauce Perigourd, hollandaise, and béarnaise. But Hirtzler was also feeding Americans, so "hamburger steak" and "homemade beef stew" are on the menu, along with gingerbread, cobbler, Southern corn pone, cactus fruit; cream of celery, Kalamazoo; hare soup, Uncle Sam; Maryland beaten biscuits, Philadelphia pepper pot, Kentucky sauce, Petaluma cream cheese, Boston baked beans, Boston brown bread pudding, and Boston and Manhattan clam chowders. Escoffier lists only one recipe using chocolate; Hirtzler, in the hometown of Ghirardelli, has many, including chocolate cream pie. Hirtzler also did something that Escoffier never did—he named dishes after himself. There are Celery Victor, Chicken Salad Victor, Crab Cocktail Victor, Victor Dressing, and Coupe Victor. Chef Victor Hirtzler lives on today in the Victor Restaurant at the top of the St. Francis Hotel.

However, a classically trained chef from Europe had to make accommodations to cooking in the United States. Even if dishes had the same name, charcuterie was very different—there is no French equivalent of ribs, while America's bottom round is several different cuts in French, as the illustrations show.

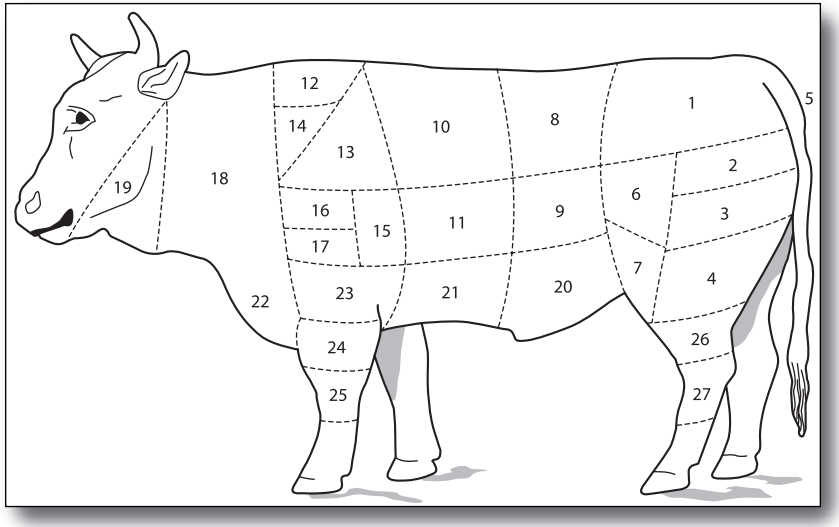


1. Head
2. Beef jowl
3. Neck
4. Brisket
5. Cross ribs
6. Shin
7. Chuck ribs
8. Plates
9. Navel
10. Inside flank
11. Thick flank
12. Six Prime ribs, A first cut, B second cut, C third
13. Short loin
14. Hip
15. Round
16. Aitchbone rump
17. Round bottom
18. Leg of beef
19. Butt
20. Oxtail
21. Horseshoe legs
22. Hip and loin
23. Whole chuck
24. Round top

Beef, American Cuts (*Boeuf Coupe à l'Americaine*). *From* The Epicurean *by Charles Ranhofer, Chicago: The Hotel Monthly Press, 1920.*

"I've Been Dining on the Railroad": The Harvey Girls Civilize the West

Anywhere that considered itself civilized served French food, even remote regions of the American West. Disgusted with the poor food at railroad stops, British-born Fred Harvey established a string of first-quality restaurants that stretched from Chicago south and west to San Francisco, along the Atchison, Topeka, and Santa Fe Railroad. In the thirty minutes patrons had while their train was stopped, the Harvey houses served food that was perhaps French, or at least French sounding. For example, Cream of Chicken Reine Margot, Consomme Careme, Jumbo Bull Frog Almandienne, and Medaillon of Salmon Poche, Sauce Mousseline [their spellings]. American foods included mashed potatoes, raspberry sundae, Manhattan clam chowder, Roast Home-Made Veal Loaf, Broiled Live Baby Lobster (whole), and Saratoga Chips (aka potato chips).[23] These dishes were served in Wichita, Kansas; Guthrie, Oklahoma; Amarillo, Texas; Trinidad, Colorado; Clovis, Deming, and Raton, New Mexico; and Needles, Mojave, and Merced, California.



1. Culotte
2. Tranches petit os
3. Milleu du gîte à la noix
4. Derrière du gîte à la noix
5. Tendre de tranches intérieure
6. Tranche grasse intérieure
7. Pièce ronde partie intérieure
8. Aloyau ave filet
9. Bavette d'Aloyau
10. Côtes couvertes, à la noix
11. Plat de Côtes
12. Surlonge partie intérieure
13. Derrière de paleron
14. Talon de Collier
15. Bande de Macreuse
16. Milleu de Marcreuse dans le paleron
17. Boite a molele
18. Collier
19. Plat de joue
20. Flanchet
21. Milieu de poitrine
22. Cros bout
23. Queue de gîte
24. Gîte de devant
25. Cros du gîte de devant
26. Gîte de derrière
27. Cros du gîte de derrière

Beef, French Cuts (*Boeuf Coupe à la Française*) [original spellings]. *From* The Epicurean *by Charles Ranhofer, Chicago: The Hotel Monthly Press, 1920.*

At first, waiters served the food, but they got into fights—with their fists, with knives, with guns. They destroyed kitchen equipment and missed work. Harvey's solution: fire the men and hire women. The Harvey Girls were single white women "of good character" from eighteen to thirty years old who answered ads in newspapers in the East and Midwest. Some came because there were many more men than women in the West, but the six-, nine-, or twelve-month contract each woman signed said she could not get married during that time without losing her job, her pay, and her railroad pass.

A large staff was necessary to get food on the tables so quickly in the à la carte lunchroom and a dining room, and the waitresses were the majority: "in order of importance, a manager, a chef, a head waitress, between fifteen and thirty Harvey Girls, a baker, a butcher, several assistant cooks and pantry girls, a housemaid, and busboys."[24] Harvey chefs were mostly European. The front of the house—the Harvey Girl waitresses—were all white. Their professional waitress uniform was long and black—dress to the floor, sleeves to the wrist, high collar. Over this was an immaculate white apron. They worked ten hours a day, six or seven days a week. The kitchen workers reflected the population of the Southwest—Black, Hispanic, and Indian.

The railroad subsidized the restaurants, which they allowed to operate at a loss, because "Fred Harvey Meals All the Way" was a guarantee of good food that sold train tickets. Harvey was a perfectionist who showed up in his restaurant kitchens unannounced and "looked the place over as if he suspected a murder had been committed and the search was for clues."[25] He fired people if he didn't like their attitude or if they tried to cut corners by squeezing orange juice ahead of time instead of when it was ordered.

Mobile Dining *de Luxe*—the *Titanic*

The same stringent standards applied on ships. Crossing the Atlantic Ocean by luxury liner was done by a small elite; only 205,000 passengers crossed in 1902.[26] An acronym to describe the way the wealthy made the crossing became a synonym for luxury: *posh*. It stood for "Port Out, Starboard Home," which ensured that the cabin would always be facing the south and the sun.

The 883-foot-long *Titanic*, 46,328-supposedly-unsinkable-tons with eleven decks, struck an iceberg in the North Atlantic on April 14, 1912, at 11:40 p.m. and sank less than three hours later, at 2:20 a.m. on April 15, 1912. Its lounge was patterned after the Palace of Versailles; it had a marble drinking fountain, Turkish baths, a gymnasium, and was the first ocean liner to have a swimming pool and squash courts. Among its passengers were ten millionaires, people with names like Astor, Guggenheim, Widener, and Rothschild. For the dinners that were served to the

322 first-class passengers in their own dining room, the Goldsmiths and Silversmiths Company of Regent Street in London had provided 10,000 pieces of plate.[27]

It was a British ship, so dinner was announced by buglers playing "The Roast Beef of Old England."[28] The last meal served was on Sunday night, April 14, 1912, and it was supposedly the most lavish served on the ship: oysters, salmon, filet mignon, roast duckling, foie gras, squab, asparagus, chocolate and vanilla eclairs, and French ice cream for the finale.[29] It took a staff of about sixty chefs and forty assistants (mostly French), and fifty waiters (mostly Italian) to get the 2,000 breakfasts and dinners prepared and served.[30]

That last night, Sunday dinner had been served and the kitchens were closing down. The shipbuilder popped in to thank the baker for a special bread. Almost everyone on the ship retired for the night, looking forward to being in New York in forty-eight hours. But the ship sideswiped an iceberg which slit a 300-foot gash in its side. For the first time, radio operators used the new code—SOS for "Save Our Ship"—at sea. The ship *Carpathia* picked up the last of the 711 survivors by 8:00 a.m. This was fortunate, because no one had bothered to put food or water or compasses on the lifeboats of the unsinkable ship. One thousand, four hundred and ninety people drowned on the *Titanic*. The highest proportion of passengers saved was from first class, the lowest, from third class. The staff couldn't even think about getting on a lifeboat until all the passengers were on. As far as historians can determine, all of the kitchen staff died except one. A seventeen-year-old cook was saved by accident. He was helping a woman carry a child and was swept overboard when the ship went under. He was picked up by a lifeboat.[31] Almost twice as many kitchen staff died on the *Titanic* as at Windows on the World on September 11, 2001. The press busied themselves with obituaries of the rich and famous on the *Titanic*, but only one person tracked down the names of as many of the kitchen staff as possible and printed obituaries of them—Escoffier.

Escoffier at Sea: Bigger than the *Titanic*

Germany had been competing with England ever since the Industrial Revolution began in the 1750s in England. As the British expanded into Africa and Asia, so did the Germans. Now, the kaiser was increasing the German navy in a direct threat to British supremacy on the seas. Nationalism was rising in Germany, but in the kitchen the kaiser wanted only French food and French cooks. On May 25, 1912, the Hamburg-American liner *Imperator*, 52,000 tons, 900 feet long, was launched. It was Germany's answer to the *Titanic*, bigger than the *Titanic*, and had learned a lesson from the *Titanic*, which had sunk a month earlier: the *Imperator* carried extra lifeboats. The *Imperator* had a swimming pool,

marble bathtubs, and other fittings that made her top heavy so that she rolled badly.[32] It was Escoffier's first trip across the Atlantic, on his way to open the kitchen at the Hotel Pierre in New York City. Tensions were high in Europe; the smell of war was in the air. After an imperial banquet for more than 100 people, Escoffier talked to the kaiser, hoping to influence him about keeping peace in Europe. Escoffier had been through one war with Germany and did not want another one.

WORLD WAR I AND THE RUSSIAN REVOLUTION

Two years after Escoffier and the kaiser spoke, World War I began. On June 28, 1914, in Sarajevo, the capital of Bosnia, Archduke Ferdinand, heir to the Austro-Hungarian Empire, and his wife were shot and killed.

The Balkans: Powder Keg of Europe

Bosnia was one of several independent new nations on the Balkan Peninsula in southeastern Europe that had broken away from the weakening Ottoman Empire. Others were Greece, Romania, Bulgaria, Bosnia, and Serbia. The area was a powder keg because of longstanding religious and ethnic hatreds. It was where Roman Catholic Europe met Orthodox Greeks and Asian Muslims. Caucasians, Slavs, and Turks bumped borders as each nation sought to expand. (This area exploded again in 1991 with "ethnic cleansing." United Nations troops restored a tense order.) The Russian and the Austro-Hungarian Empire giants also thought the weak new Balkan countries would be easy pickings to increase their own territories.

As a result of the archduke's assassination, Germany, the Austro-Hungarian Empire, and Italy went to war against France, England, and Russia. Later, Italy changed sides, Russia left the war, and the United States joined France and England. The ability of technology to inflict wounds was much more advanced than medicine's ability to heal them at that time. The new technologies were airplanes, chemical gases, motorized tanks, and machine guns. The defense against these was primitive: dig a trench in the mud and hide. The casualties were astronomical: approximately one million men per battle at Verdun and the River Somme in northeastern France.

Armenian Cuisine

The fighting in World War I extended east to the Muslim Ottoman Empire, which had a large population of Armenian Christians who wanted their own country. Armenian cuisine is a mixture of Turkish, Greek,

Syrian, Persian, and Arabic cuisine. Like the cultures to the east of it, Armenian cuisine has flat bread, rice pilaf, and barley; like the cultures to the west, it has noodles. Like the cuisine of its neighbor to the west, Bulgaria, yogurt is a staple food, used in everything from hot and cold soups to dips, cheeses, stews, pastries, beverages, salads, and cakes. Chickpeas and lentils are widely used. Eggplant appears fried, stuffed, baked, mashed, in hot and cold casseroles, in salad, and with and without meat, usually lamb, like the layered Greek casserole, moussaka, and the Persian *Imam Bayaldi*, which the Armenians call *Iman Bayeldi*. Okra finds many uses here, along with zucchini, cauliflower, spinach, cabbage, and dolma—stuffed vegetables, especially grape leaves. An Armenian specialty is bulghur—cracked wheat—used in tabouleh salad and pilaf. Desserts are made of *kadayif* (the Persian *kataif*), a shredded wheat dough, and phyllo, and are drenched in sugar syrup, like *paklava* (Greek *baklava*). They use the fruits and nuts of the eastern Mediterranean—raisins, dates, apricots, walnuts, almonds. Sesame is used in oil and paste form—*taheen—tahini* in Lebanon and Syria, to the south.

In 1915, during World War I, the Armenians fought for their independence against the Turks. More than 600,000 Armenians died. Many of the survivors migrated to the United States, to the Central Valley of California and the city of Fresno where they grew grapes and went into the dried fruit business, especially raisins. Some famous Armenian-Americans are the writer William Saroyan and actress-singer Cher (Cherilynn Sarkassian).

The United States: From Hot Dog to "Liberty Dog"

The United States joined World War I in 1917, after Germany resumed unrestricted submarine warfare and sank American merchant ships in the Atlantic. The war was not popular; many felt that the United States had no business in a European war. The draft was difficult to enforce: approximately a quarter of a million men simply didn't show up, and before social security numbers (after the Social Security Act of 1935) there was no way to track them. World War I was also a problem for many American immigrant groups. The Irish hated the British, America's ally; the Jews objected to another ally, the Russia from which they had fled. America also had a large population of German-speaking immigrants and citizens of German descent, but Germany was the enemy. Americans turned against everything German—in principle. They wouldn't eat hot dogs and sauerkraut, which were German, but they would eat "Liberty dogs" and "Liberty cabbage," which were 100 percent American. Italy and Italian immigrants, too, were the enemy—for a while, until Italy switched sides midway through the war. Then Italian food became "Spaghetti, food of the ally."[33]

Men and women volunteered for the war effort. Some, like the writer Ernest Hemingway, went to Europe and drove ambulances. On the home front, Americans grew victory gardens to feed themselves and to add to the national food supply. They substituted peanut flour for wheat flour. Daylight saving time was instituted to help the farmers.

The Russian Revolution—"Bread and Peace"

In 1917, the year the United States entered the war, Russia left. It had already lost more than seven million men and was facing a revolution. Food played a huge part in the Russian Revolution in 1917. Peasant farmers made up the majority of the army, so when they got drafted, crops didn't get planted or harvested. There were food shortages in the country and food riots in the city. The cry of the communist revolutionaries was "Bread and Peace." Finally, even the czar's close advisors begged, pleaded, then demanded that he give up the throne. He did, assuming that one of the other countries in the world would welcome the royal family. But he was an absolute monarch, cruel and oppressive. That form of government had not existed in England and France since the seventeenth and eighteenth centuries, respectively, and they wanted nothing to do with it. The United States had multiple reasons for not sheltering the czar. As the first democracy, it was opposed to him philosophically. As the home of millions of immigrants, many of them Jews who had just fled the czar's oppressive rule and were living in densely packed cities, the United States couldn't risk the civil disturbances the czar's presence would certainly cause. The czar, czarina, their four daughters and one son were executed by the communists.

Russian Cuisine

Russia is an enormous country that spans two continents. Its west, with large cities like Moscow and St. Petersburg, is in Europe. Eastern Russia is in Asia and borders Mongolia and China. In southern Russia, the province of Georgia borders Turkey. So Russian cuisine is many cuisines with many influences. On the eve of World War I, Russian cuisine and culture were at the top of European life—for the upper classes. The lower classes were poor and starving.

In the 200 years since Peter the Great had decided to westernize his country, Russia had become a power in European politics and cuisine. The potato had become a staple. So was black bread made from dark rye and coffee. In the cold Russian climate, root vegetables like turnips and beets were staples, too, in borscht—beet soup with a sour cream enrichment. Dill and caraway were the common herb and spice. From its Asian side, Russia gets *pel'meni*—dumplings like ravioli or wontons made of flour-and-egg noodle dough filled with fish, mushrooms, or meat (orig-

inally, horse meat). Preserving foods was not a problem in Siberia, where even the ground was frozen a great deal of the year. A wide variety of foods in Russia were also preserved by pickling—cucumbers, mushrooms, apples, lemons, and cabbage, in sauerkraut. Rustic Russian standards are *shchi* (cabbage soup); kasha (buckwheat groats); and kvass (a fermented drink that can be made from leftover black bread, fruits, or vegetables).

Pierogi (*pirozhki* for the smaller version) are turnovers in a flaky pastry, with sour cream added, filled with ground meat, rice, eggs, mushrooms, or cheese. These versatile pies can be either street food or served at a banquet. A more elaborate upper-class filled pastry is *koulibiac*, the fish en croûte that Carême brought back to Paris with him in the early nineteenth century. Other pre-Revolution Russian classics are Beef Stroganoff, beef in a sour cream sauce; sturgeon soup with Champagne; and Salad Olivier, originally chicken and potatoes with mayonnaise. Another luxurious Russian dish is named after the capital of Ukraine. According to Russian food historian Darra Goldstein, Chicken Kiev is "a symbol of Russian *haute cuisine*."[34] Kiev-born Russian cookbook author Anne Volokh dates it to "the early 1900s."[35]

INGREDIENTS:

Chicken Kiev

Chicken Kiev has only a few main ingredients: chicken breast filets pounded and stuffed with herbed butter, lemon juice, and French mustard, then rolled, dipped in flour, beaten egg, bread crumbs, and deep fried in oil. When the diner cuts into the chicken, the butter bursts out. In some restaurants, the server makes the first cut because it can be messy.

Appetizers are called *zakuski*, and can include pickled spiced cherries, cucumbers or mushrooms in sour cream, beet salad, and stuffed cabbage. The most famous *zakuski* are the trio of small buckwheat crepes called blini, the caviar placed on them with a small silver spoon, and vodka to wash it all down. Blini were also traditional during Butterweek, the Russian equivalent of Mardi Gras, when they were buttered and topped with sour cream. Caviar is the roe, or eggs, of the sturgeon fish, found in the Caspian sea. It comes in several grades—osetra, sevruga, and beluga, the largest. The czars ate special golden caviar from the sterlet fish.[36] Vodka was "infused with anywhere from 3 to 40 flavors—sage,

heather honey, angelica root, ginger root, anise, juniper berries, Crimean apple and pear leaves, mint, young shoots of mountain ash, nutmeg and nutmeg blooms, vanilla, cinnamon, cardamom, cloves."[37]

Pre-Revolutionary Russians of all classes were great tea drinkers at any time of day. The lower classes sucked their tea through a sugar cube held between the teeth. The upper classes had evening teas that were elaborate and competitive: six kinds of cake, each from a different bakery.[38] The hostess poured tea "into porcelain cups for the ladies and glasses for the men. The glasses were inserted into *podstakanniki,* metal or filigreed silver holders."[39] The centerpiece was the samovar.

The Fabergé Russian Royal Easter Eggs

The Russian royal family had an Easter tradition based on the peasant tradition of painting eggs. Some of the more elaborately decorated eggs come from the Russian Christian Church in eastern Europe, especially Ukraine. *Krashanky* are hard-boiled eggs dyed one solid color, meant to be eaten. *Pysanky*, purely decorative, are made from raw eggs dyed many times in multi-colored elaborate patterns. Each color has a symbolic meaning: yellow means a successful harvest; green represents the rebirth of spring; black is the dark before the dawn, when the souls of the dead travel, especially between the first and third crow of the rooster. The dyes were made from plants: red from beets; orange from onion skins; blue from red cabbage leaves; brown from nut shells. Now, everything from tiny quail eggs to enormous ostrich eggs are decorated.

Every year the Russian royal family exchanged Easter eggs, but they weren't folk art. They were made by Fabergé, the royal jeweler, out of gold, silver, platinum, and crystal studded with diamonds, rubies, pearls, emeralds, and sapphires. Each egg had a surprise inside, often mechanical. For example, a platinum egg ten and one-quarter inches high opened up to reveal miniature gold railroad cars that hooked together and ran when wound up with a key. A tiny golden replica of the royal yacht floats in a crystal sea; the whole thing is six inches high. A miniature version of the coach in which the czar and czarina rode to their coronation in 1896 comes out of a golden and jeweled egg, three and eleven-sixteenths inches long. The last egg was "modest," a Red Cross on a white background, because it was just beginning to dawn on the royal family that it might be in poor taste to flaunt their wealth in the face of famine and war. Too late.

The Easter egg for 1911 was a miniature orange tree, eleven and three-quarters inches high, with a gold trunk, studded with "oranges" and "orange blossoms" made of precious stones. A secret "orange" made a little bird pop up out of the tree and sing. In 2000, when an exhibit of Fabergé eggs was on display at the Riverfront Arts Center in Wilmington,



Chocolate Fabergé Egg Sculpture. *Chocolate Fabergé Egg Sculpture created by Michele Mitchell, Executive Pastry Chef of the Hotel du Pont, Wilmington, Delaware*

Delaware, Executive Pastry Chef Michele B. Mitchell (a 1988 graduate of the Johnson & Wales Pastry Arts Program) at the Hotel du Pont in Wilmington, Delaware, and her staff re-created the Orange Tree Egg out of sugar work, chocolate, fondant, gold leaf, and silver dust. It was three and one-half feet tall and took about 100 hours to create. They also made forty-five miniature orange trees as room favors. The top half of the small tree dome came off to reveal truffles inside, as a turn-down service for the VIPs at the gala opening of the exhibit, which was held at the hotel.

The Cities: People Eat Communally

The Russian Revolution completely changed the relationship of the citizen to the state and to the food production and distribution system. Lenin, the leader of the new communist bolshevik government, pulled Russia—now called the Union of Soviet Socialist Republics, or U.S.S.R.—out of World War I. After a further four years of civil war, from 1917 to 1921, there was no more private ownership of property; it all belonged to the state, communally. Gone, too, were the titles. No more princes or princesses, dukes or duchesses. As in the French Revolution, they were all either dead or fled. Everyone was equal in the new classless society where people addressed each other as "comrade." This meant drastic changes in all levels of society and in the food people ate, where and when they ate it, and how they grew it.

In the cities, the government took over the restaurants, hotels, and mansions that had been used by the upper classes and turned them into communal dining places where all workers had to eat.[40] Then they organized food preparation and distribution throughout the entire country as if it were one enormous kitchen. Communal dining was also intended to free women from their traditional kitchen duties so they could work in factories or on farms. Shortages of skilled kitchen staff resulted in small portions of food that tasted terrible prepared in unsanitary conditions and led to epidemics and strikes. Meals were "tiny plates of barley gruel" or "soup with herring head or rotten sour cabbage." Moldy grains, bread the consistency of clay, and "coffee" made from acorns rounded out the meal.[41]

People still wanted the food they were used to, and some of them had the money to pay for it. Secret restaurants sprang up. With the right connections and the right password, you might be lucky enough to find yourself in a place with tablecloths and napkins, eating roast meat and vegetables and something made with flour and sugar.[42] The country desperately needed to produce more food; the daily bread ration had dropped from one pound per person in 1917 to two ounces in 1919.

The Country: People Farm Communally

After Lenin died in 1924, St. Petersburg, the city founded by Peter the Great in 1703, was renamed in Lenin's honor: Leningrad. Stalin took over the U.S.S.R., with a five-year plan for agriculture and industry. His goal was to make the country an industrial giant equal to the United States. To do this, he needed equipment and engineers. International Harvester, the American company that made threshing machines, opened a factory in the U.S.S.R. To buy the heavy industrial equipment the U.S.S.R. needed, they sold the only thing they had: grain. They sold millions of tons of grain; millions of Russian people starved. Large farms

were split up and people were forced to farm together. Without the incentive of keeping food for themselves or selling it at a price they wanted, food production dropped. Many of the successes that Stalin claimed in food and industrial production were only numbers on paper that bore no resemblance to reality.

The Punitive Treaty of Versailles and the Seeds of World War II

World War I ended in 1918, at the eleventh hour on the eleventh day of the eleventh month: 11:00 a.m., November 11. The day and time were chosen purposely so that no one would ever forget the horror of "The War to End All Wars." There certainly would never be another war. Who would be insane enough to go through anything like that again?

In 1919, the victors—England, France, the United States, Italy, and Japan—got together at the Palace of Versailles to draw up a peace treaty and decide what to do with Germany. The result was the Treaty of Versailles. The adjective that has always been used to describe the treaty is *punitive*—punishing. Germany had to publicly admit that it started the war; it had to repay England and France for the war; its colonies in Asia were given to Japan; its colonies in Africa were divided between England and France; its western border, the province of Alsace-Lorraine, taken in the Franco-Prussian War in 1870, was returned to France; its eastern border, a strip of land known as the Danzig Corridor, became part of the newly created country of Poland. These conditions made economic recovery nearly impossible for the Germans. Money became worthless. One American dollar was worth more than 800 million German marks. Food prices skyrocketed—a loaf of bread cost a shopping cart full of money. The United States objected to the treaty, sure that these harsh surrender terms would only enrage the German people and make them want revenge.

The map of Europe was literally re-drawn because of World War I. The Austro-Hungarian Empire was broken into the separate countries of Austria, Hungary, and Czechoslovakia. It also ceded territory to Italy, Romania, and Bulgaria. Bosnia, Serbia, and Albania were combined to create Yugoslavia. Western Russia became the new Finland, part of Poland, and the smaller countries of Estonia, Latvia, and Lithuania.

The map of Asia was changed, too. The Ottoman Empire had fallen. Earlier, it had lost its territory in the Balkans in southeastern Europe. Now, it had also lost territory in southwestern Asia. New countries were created: Syria, Iraq, Jordan, and Saudi Arabia, named after the powerful Saud family. Saudi Arabia was an Islamic state, very conservative, where alcohol was and still is illegal. The core of the Ottoman Empire, the city of Istanbul in Europe and the Anatolian plain in Asia, became Turkey, an independent country in 1923, still part European and part Asian: its legal system was separate from its religion.

In eastern Asia, Japan was making its bid to become an empire after the fall of the Chinese empire in 1911. And working as a dishwasher in the kitchen at Ritz's Savoy Hotel in London was a young man from French Indochina who wanted freedom for his country. He tried to see America's President Wilson to show him the document he had drafted for his country patterned after the American Declaration of Independence, but Wilson wouldn't see him. More than forty years later, the United States was forced to deal with Ho Chi Minh in his own country—Vietnam.

After four years of horror, the world was glad the war was finally over. It was tired of death and economizing. It was time to party.



Eleventh Course

Prohibition, Soup Kitchens, Spam, and TV Dinners: THE ROARING TWENTIES, THE DEPRESSION, WORLD WAR II, AND THE COLD WAR

THE ROARING TWENTIES IN THE UNITED STATES

A major change occurred in the global economy as a result of World War I. The United States emerged from the war a creditor nation—for the first time, other countries owed the United States money. The war was expensive; European countries had borrowed money from the United States to pay for it. As a result, the center of world banking shifted to New York City, where it remains today, even though the United States is now a debtor nation—it owes money to other countries.

American soldiers returning home brought the more easygoing morality they had been exposed to with them. Young people who had seen too much death developed a hedonistic, carpe diem attitude—"seize the day" or "eat, drink, and be merry"—because tomorrow you might die. But some found their jobs gone and their neighborhoods changed

because of African-Americans who had migrated north to work in factories during the war. Angry whites rampaged through black neighborhoods, lynching in Chicago and East St. Louis; they burned the entire African-American section of Tulsa, Oklahoma, to the ground.

Nineteen twenty was a watershed year in American history. For the first time, more Americans lived in cities (figured at 2,500 people) than in the country. It was the year of the first transcontinental airplane flight—no passengers, just mail—and of the first international black congress, at which African-Americans issued their own declaration of rights, just as white women had done at Seneca Falls, New York, in 1848, seventy-two years earlier. In 1920, Americans heard the first radio broadcast. Six years later, they heard the first radio advertising jingle; it was for a new breakfast cereal, Wheaties. Two Constitutional amendments went into effect in 1920. The eighteenth amendment outlawed alcohol. The nineteenth amendment granted women the right to vote.

"[T]he manufacture, sale, or transportation of intoxicating liquors . . . is hereby prohibited."

On January 17, 1920, the eighteenth amendment to the Constitution shut down the seventh largest industry in the United States. This didn't happen overnight. The Temperance Movement began in the early nineteenth century as religious opposition to rum drinking. That is why coffee replaced rum as the standard beverage of the United States Army in 1832. The Temperance Movement gained momentum in the middle of the nineteenth century when beer-drinking German and whiskey-drinking Irish immigrants began arriving in large numbers. At the end of the nineteenth century came wine-drinking Italians and Hungarians, vodka-drinking Poles and Russians, beer-drinking Czechs and Lithuanians. American women countered with the WCTU—Women's Christian Temperance Union—and took to picketing in front of bars and sometimes going inside and smashing them with hatchets. Progressive reformers thought that alcohol caused a wide variety of social ills. Workers who spent the weekend binge drinking missed work on Monday, or showed up hungover and had accidents—"Blue Monday." Factory workers who got paid in cash on Friday went to the bars across the street and drank and gambled their pay away so their families had no money for food. Young sons who went into bars looking for their fathers became juvenile delinquents. Daughters turned to prostitution to put food on the table. And a drunk voter could be bought. Progressives thought that prohibiting alcohol would cure all these problems.

The alcohol industry didn't mount a serious campaign against the prohibition movement because beer and wine producers couldn't believe it would affect them. To European immigrants, unfamiliar with the tradition of Puritanism in the United States, beer and wine were like wa-

ter, or instead of it. They thought that at the worst, only hard liquor—distilled spirits—would be prohibited, which would mean more business for them. But *all* alcohol over half of one percent was prohibited. There was a loophole: suddenly, people were getting prescriptions for alcohol "for medicinal purposes." Hard-core alcoholics sneaked into churches and synagogues to steal the sacramental wine, or drank the alcohol that fueled small appliances like curling irons. Wine production plummeted from fifty-five million gallons in 1919 to four million gallons in 1925. However, grape production dropped right after the eighteenth amendment was passed, then rose again. Clever vintners marketed grape juice and "bricks" of dried grapes with labels warning consumers UNDER NO CIRCUMSTANCES to add water and yeast or the grapes would ferment and turn into wine. Some estimates are that wine consumption doubled by the end of the decade.[1]

Prohibition destroyed the California wine industry, which had been winning prizes in Europe. It was also a knockout punch for French restaurants. It wasn't just the wine consumed with the meal—it was the alcohol-based marinades and sauces. You can't have coq au vin without the *vin* or boeuf bourguignon without the burgundy. No more cherries jubilee or crêpes suzette if there's no alcohol to flambé. White-gloved waiters who were skilled in these dramatic tableside presentations were also out of work.

Crime: The Beer Wars and Al Capone

Prohibition caused crime to increase, not decrease. It turned law-abiding Americans who saw nothing wrong with having a drink into casual lawbreakers. When drinking was legal, bars had to close. When it became illegal, bars could stay open all the time. People went to the new underground drinking places, called "speakeasies," where they knocked on the door and whispered the password. In the countryside in cold parts of the country, water tanks were filled with cider. The juice fermented during the day and the water froze at night. Skimming the ice off every morning reduced it to apple jack—homemade apple brandy. Violent crime increased, too, as the gangs that smuggled liquor in trucks from Canada or by ship along the coasts fought each other using World War I surplus Thompson submachine guns—Tommy guns. And since they were taking a risk, it was much more profitable to sell distilled spirits with a higher alcohol content than bulky beer.

Crime was especially violent in Chicago, where gangsters killed each other for control of breweries, which continued to operate by bribing officials. Dozens of innocent bystanders got caught in the crossfire of drive-by shootings. On Valentine's Day, February 14, 1929, Al Capone's gang machine-gunned seven rival gang members in a garage on Clark Street. This was too much. The government sent in federal agents, who

became known as "The Untouchables," to get Capone. They realized that it would be impossible to get him on criminal charges because he would just kill anyone who testified against him, so they convicted him of not paying income tax. He was sent to the federal prison in Atlanta, Georgia, until 1934, when he was shipped to the new super-prison on an island in San Francisco Bay—Alcatraz.

The architects of Alcatraz thought of everything, including the food. They decided that because so many prison riots started because of poor food, the food in Alcatraz would be far superior to that in any other prison in the United States. This advice was forgotten later at the maximum security prison in upstate New York at Attica, where one of the causes of the worst prison riot up until that time on September 5, 1971, was food. The prison administration bought pork, an inexpensive meat. However, a large percentage of the prison population was African-American Muslims, who couldn't eat it.[2]

The Good Humor Man Meets the Mob

Americans went crazy for candy in the 1920s, which saw the birth of the Milky Way, Butterfinger, Oh Henry, and Mounds bars. These followed the Hershey bar, which had been created by Milton Snavely Hershey, the son of German immigrants, in Pennsylvania. In Youngstown, Ohio, Harry Burt invented a hard candy on a stick, which he called the Jolly Boy Sucker. What he really wanted to do was put a chocolate coating on an ice cream bar. Problem: the ice cream melted or the coating clotted. He finally got it to work, but holding it was messy. The solution: put it on a stick like his other candy. He called his confection "Good Humor" because it put him in a good humor to eat it. Harry Burt got a patent, then he got an old truck, painted it white, put on a white uniform, took the bells off a sleigh, and rang them as he drove slowly down the street, attracting children. As he became successful, gangsters wanted a percentage of the profits. When he refused, they blew up his trucks. The Good Humor Man and his white truck were a standard fixture in the 1950s and 1960s as Americans moved to the suburbs, one of the last foods still delivered to homes. Now, Good Humor is just one product of the company that makes Breyer's Ice Cream and Klondike Bars. Good Humor trucks still exist, but they don't travel down city streets any more. Some refurbished ones are available for rent from private companies.

The Immigration Door Slams Shut; The Harlem Renaissance

In 1924, the Immigration Act cut immigration for two groups—southern Europeans and eastern Europeans, mostly Italians and Jews—to a minimum. By this time, many Americans regarded Italians as a "criminal class,"

and Jews as radicals who wanted to overthrow the American government. Italy's fascist dictator, Mussolini, also stopped the hemorrhage that had reduced the population of Italy by one-third by refusing to issue exit visas. Exceptions: Mexicans were not restricted from coming into the United States because farmers needed cheap labor. But once in, they were severely restricted as to where they could go and what they could do. Mexicans who attempted to leave the fields and move to the cities were stopped—by the police, if necessary. Mexicans were considered "colored" and were subjected to the same Jim Crow laws as African-Americans in the South: forced to ride in the back of the bus, use separate public facilities, waiting rooms, and water fountains, and to go around the back door of restaurants to get food. In 1927, Asians were added to the list when the Supreme Court ruled, in the case *Lum v. Rice*, that a Chinese girl could not enroll in a Mississippi school because she was "colored."

There was another unintended loophole in the immigration laws. People with British passports were always allowed into the United States. Britain owned many islands in the Caribbean, so all the inhabitants were British citizens with British passports. And they were black. Many people from the Caribbean used this opportunity to migrate to New York City where they became one-quarter of the population in Harlem, and the heart of a cultural flowering of poetry, novels, art, and music called the Harlem Renaissance.

At Harlem nightclubs like the Apollo, performers and staff were all black, but only white customers were allowed in. Jazz and blues, uniquely American music with roots in Africa, came up from New Orleans to St. Louis, Kansas City, and Chicago after World War I when the United States government forced New Orleans to close down the red light district, Storyville, because too many sailors were getting into trouble (or ending up dead) there. Jazz greats like Louis Armstrong said goodbye to their families and got on the trains headed north.

A black leader emerged from this movement, Jamaican Marcus Garvey. He said that his people were not "colored," they were Negro, and make sure you spell that with a capital "N." He preached pride, and urged blacks to go to black stores, black banks, and black businesses. The United States government deported him back to Jamaica.

The Ideal American Woman

In the 1920s, Americans became obsessed with appearances. People stopped asking what good deeds a person had done and said instead, "What does he/she look like?" Americans discovered beauty contests, diets, salad, and sliced bread. Women cut their hair short like men, raised their hemlines to the knees, and declared that they were liberated. Nineteen twenty-one saw the birth of two mythical American women. One sprang from the glitz of Atlantic City, New Jersey; the other was con-

ceived in a board room in the grain-growing heartland in Minneapolis, Minnesota. One was all about appearance; the other was pure function. One had physical reality but no substance; the other was all substance but a physical fiction. Miss America and Betty Crocker were flip sides of the same coin, two opposite images of the ideal American woman. They have both changed over time to reflect how women's appearances and roles have changed, as the official Betty Crocker portraits show.



The evolution of Betty Crocker—Betty Crocker's official portraits. *Courtesy General Mills Archives*

Betty Crocker began as a serious-looking, unsmiling housewife. By the 1950s, she still looked like somebody's grandmother or aunt, but she was smiling. The women's movement that crystallized around the publication of Betty Friedan's book *The Feminine Mystique* in 1963 showed in the Betty Crocker pictures of 1968 and 1972, which looked like professional women who worked outside the home. The 1986 Betty Crocker looked a little more shrewd and tough than the others, as if she had a Masters in Business Administration and wouldn't cook food as much as order others to do it. The Betty Crocker of 1996 was softer, more casual and approachable, and had the biggest smile yet. There was also a search for handwriting that would look like Betty Crocker's, because she answered thousands of letters about cooking from American women. Betty Crocker became a merchandising empire. She had her own radio show and cookbook.

The emphasis on appearances extended to food. The invention of color printing made advertising in magazines, newspapers, and posters

easy and affordable. Consumers wanted food that looked just like the perfect pictures. This explains why the tasteless Red Delicious is the best selling apple in America: it looks like the apple in children's alphabet books ("A" is for apple). Regardless of the ideal picture, cooking was still done in real kitchens by real people, like women in a tortilla factory.



Women in a tortilla factory. *Courtesy Security Pacific Collection/Los Angeles Public Library*

Movie Star Cuisine

In the early 1920s, Hollywood movie stars represented the ultimate in appearances because the movies didn't have sound. They lived in enormous homes that looked like French châteaus, Italian villas, Spanish ha-

ciendas, or European palaces. Their estates had swimming pools, tennis courts, marble floors, gatehouses, vast lawns. Wild parties took place. They ate at the It Café on Vine Street in Hollywood, owned by sexy Clara Bow, who had "It"; or at the Brown Derby on Wilshire Boulevard, shaped like a derby hat, where Bob Cobb invented the chopped salad of lettuces, chicken, bacon, and avocado named after him. In Tijuana, Chef Caesar Cardini supposedly invented the Caesar salad, which became popular in California. In the 1930s, actors began congregating at a new barbecue joint called Chasen's. Sometimes actors overdosed on drugs or were murdered under mysterious circumstances.

One movie star never got into trouble. He made $100,000 per year and was insured for five times that amount. His Beverly Hills estate was complete with all the trappings that Americans found irresistible in the 1920s: an electric refrigerator in the hygienic white kitchen, electric lights, fans, heating, a radio. His dinner service was silver. His yard was screened in to keep flies away. He traveled with "the best of everything, beds, drawing rooms on trains, private baths."[3] And with his usual entourage: personal valet, bodyguard, trainer, and special chef. He received more than 10,000 fan mail letters a week, sometimes a million a year. He made public appearances, visited children in hospitals and orphanages. He was studio head Jack Warner's favorite star because his movies made so much money they saved Warner Bros. from bankruptcy, and because he never gave the studio any trouble. He didn't care if his movies got bad reviews; his ego didn't become hugely inflated if they did well; he didn't drink, smoke, do drugs, or have affairs; and he never talked back.

He was a dog.

Rin Tin Tin was a pedigreed German shepherd bred to be a war dog for the German army in World War I. His owner, American soldier Lee Duncan, found "Rinty" in a trench in France when he was just days old and brought him home to California. Rin Tin Tin was a merchandising empire. He was "spokesdog" for Ken-L-Rations dog food; dog biscuits were passed out in theater lobbies where his movies played. There were Rin Tin Tin statuettes, buttons, pins, photographs, and fan clubs. He mailed not autographs but "pawtographs" to his fans by the thousands. And he had his own radio program, *Rin Tin Tin Thrillers*—just like Betty Crocker.

All actors were aware of what they called the "potato clause" in their contracts, which said that any change in appearance could be grounds for terminating the contract—for example, if they gained weight. In 1927, Warner Bros. fired Rin Tin Tin, but not because he was fat. It was because they started making movies with sound, and "dogs don't talk."

The Discovery of Vitamins and Penicillin

In the 1920s, scientists began to discover exactly what was in food. They called these properties *vitamines*, a combination of *vita*, meaning "life"

and *amine* for amino acid, and named them with letters of the alphabet. Vitamin A, in liver and carrots, affects eyesight. Deficiency causes night blindness; excess results in nausea, joint pain, and death. B vitamins, in brown rice, pork, and liver, make the nervous system function. Vitamin C counteracts scurvy. Vitamin D, the "sunshine vitamin," is in milk and helps to build bones. Without it, bone-deforming rickets occurs. Vitamin K causes blood to clot. There are other vitamins, and scientists are still discovering the properties of foods.

In 1929, Alexander Fleming, a British physician, noticed that something was destroying his experiment. Some mold from bread had gotten into it and killed it. He had discovered *Penicillium notatum*, the first antibiotic (Greek: *anti*, "against," *bios*, "life"). Soon after, other antibiotics like the sulfas, the mycins, and tetracycline were discovered. Penicillin came into widespread household use in the United States after World War II, when it was mass-produced for use in the war. Fleming was knighted and was one of the winners of the Nobel Prize in 1945 for his discovery.

The Rise of the Supermarket and the Fall of the Stock Market

As 1929 began, life was looking good. The Industrial Revolution had arrived in the American home. Electricity and new appliances replaced household servants: electric stoves and refrigerators, vacuum cleaners, washing machines, toasters, sewing machines, teakettles. People could save time by purchasing their bread already sliced and their vegetables frozen in a process invented by Clarence Birdseye after he saw Eskimos quick-freezing food. (Then Marjorie Merriwether Post, of the Post food family, bought Birdseye's operation and changed the name to General Foods.) Americans ate canned food and fed their infants the convenient new baby foods made by Gerber.

They bought all these foods in the new one-stop supermarkets. The Alpha Beta supermarket had everything in alphabetical order; customers could walk up and take what and how much they wanted instead of waiting for a clerk to help them, like in the old general stores. Another food giant, the A & P—the Great Atlantic and Pacific Tea Company—was selling one-tenth of all retail food in the United States and doing $1 billion a year in business.[4] The USDA was inspecting meat, and Coca-Cola was free of coca. The Public Health Service monitored twenty-nine diseases including food-borne illnesses in every state, the District of Columbia, Hawaii, and Puerto Rico. There was one car for every five people in the United States, compared with one for forty-three in England, and one for 7,000 in Russia.[5] There were many fun things to do, like driving around in the car with friends, going to movies and dances and parties. Anyone who really wanted a drink could get one. America was in a party mood. Party party party.

In October 1929, the stock market crashed. It was the greatest financial flop in American history up to that time. Stock prices dropped; millions of people lost their jobs. People who had been worth millions were suddenly wiped out. Some committed suicide by jumping out of their office windows. During the presidential campaign in 1928, Herbert Hoover had promised Americans that if he was elected, he would put "a chicken in every pot." After the stock market crash, many Americans not only didn't have a chicken, they didn't have a pot.

The party was over.

THE GREAT DEPRESSION AND THE NEW DEAL

Because the United States was more industrialized than other countries, it was hit harder by the Depression. Unemployment across the United States reached deep into the middle class. Many people lost their homes. They lived in empty lots or down by the railroad yards, in shacks made of old pieces of tin or cardboard boxes. They heated themselves by making fires in barrels; they ate garbage and food scraps they scrounged or begged. These new "towns," called "Hoovervilles" in bitter honor of president Herbert Hoover, sprang up all over the United States. Hoover, a Republican, told Americans who saw their lives getting worse and worse that "Prosperity is just around the corner."

Soup Kitchens and Bread Lines

With millions of people out of work, public funds and private charities were quickly overwhelmed. Gangster Al Capone saw the Depression as a public relations opportunity to present himself as the patron saint of Chicago and set up its first soup kitchen and fed 3,000 people a day. It didn't keep him from being sent to prison.[6] Some organizations handed out free bread, but accepting charity at that time was regarded as shameful, and people standing in line to receive free food often tried to hide their faces. The Los Angeles County sheriff's department did better than soup and bread lines—it hosted an annual barbecue. The meat was pit-cooked for fourteen to fifteen hours, the west coast equivalent of the New England clambake, but with beef. First, they cut the number of people who needed food by deporting thousands of Mexicans back to Mexico.

Hoover lost resoundingly in his bid for re-election in 1932 to Democrat Franklin Delano Roosevelt (FDR). Polio had almost killed FDR; it left him in a wheelchair (although he was always photographed without it). It also left him knowing what human beings can accomplish if they have enough will power.

RECIPE:

Los Angeles County Annual Barbeque[7]

MAKES 75,000 8-OUNCE SERVINGS

Amount	Ingredient
40,000 pounds	prime steer beef, forequarter only, cut in 25-pound chunks
300 crates	tomatoes, chopped
4,000 pounds	onion, chopped
50 pounds	garlic
700 pounds	salt
125 pounds	black pepper
25 pounds	green chili peppers, seeded and chopped
50 pounds	ground celery seeds
50 pounds	ground oregano
10 pounds	ground cuminseed
100 pounds	vinegar

"I see one-third of a nation ill-housed, ill-clad, and ill-nourished."
—President Franklin Delano Roosevelt[8]

Roosevelt, inaugurated on March 4, 1933, told the American people the truth—the Depression, entering its fourth year, was getting worse, not better. This, along with an unprecedented, steep rise in violent crime, much of it connected to gangsters and Prohibition, had Americans hungry (and thirsty), angry, scared, and losing confidence in their government. People literally ran to the bank and took their money out—first come, first served. If you got there late, your money was gone. Many Americans wondered if capitalism and democracy were going to survive or should be replaced with something else. In Russia, Stalin's communist five-year plan was succeeding—at least according to Stalin; in Germany, Hitler's National Socialist party, the Nazis, were feeding people and turning the economy around. FDR reassured the American people: "We have nothing to fear but fear itself."

Roosevelt had a three-pronged approach, the three "R's": relief, recovery, and reform. He would provide financial relief to people in the form of jobs and money; begin programs to help economic recovery;

and reform the laws controlling banks and the stock market. In the first hundred days after his inauguration, Congress was happy to pass any programs the president proposed.

Alcohol in the New Deal

One of the first things FDR did after his inauguration was ask Congress to make beer and wine legal again. On March 22, 1933, Congress passed the Beer and Wine Revenue Act on the grounds that the country needed the tax money. (Roosevelt thought they needed a drink.) One newspaper cartoon showed FDR as a waiter, towel over his arm, a tray loaded with foaming beer, running to a table. The caption read, "I Call That Service."

By the end of FDR's first year in office, all alcohol was legal again. On December 5, 1933, the twenty-first amendment to the Constitution repealed the eighteenth amendment. Prohibition was over. However, the decision of whether to be wet or dry was left to the individual states. Utah is still dry. Nineteen thirty-three was also the year that a California man invented a handy gadget that solved a problem that had been a bane to mankind: it took the pits out of green olives, making them suitable for dropping into martini glasses.[9]

Although people could begin drinking again, the industries that produced alcohol had gone out of business or been closed for thirteen years. In 1933, there were about 130 wineries left in California; around 150 total in the United States, down from more than 1,000 pre-Prohibition. Equipment was rusted, casks rotted. The 1934 vintage "may well have been the worst commercial American wines ever produced. Some, still fermenting when first shipped, literally blew up on store shelves."[10] The reputation of wine fell, further depressing the wine industry. It took decades to recover.

Bill W. and Dr. Bob: Alcoholics Anonymous—AA and the Twelve Steps

Once drinking was legal again, some people began to admit, after years of trying to deal with it themselves, that they were alcoholics. Two, Bill W. and Dr. Bob, both Vermont natives, had severe blackouts (twenty-four hours at a time), multiple hospitalizations, and were considered hopeless. Bill W. was on the verge of being committed to an institution when a friend told him about the Oxford Group, a worldwide religious organization founded by a Lutheran minister and dedicated to changing the world "One Person at a Time." One of the men Bill W. met at a meeting had gone to Europe in desperation to see the famous psychoanalyst Carl Jung, who told him that medicine and science could do nothing to help him; it would take a spiritual conversion. Bill W. had such a conversion, and then "there came a vision of a society of alcoholics, each identifying with and transmitting his experience to the next—chain style."[11] He proceeded to

bring this philosophy to others, including Dr. Bob. The official date of the beginning of Alcoholics Anonymous is June 10, 1935—the day Dr. Bob took his last drink. In 1938, the Twelve Steps—the guidelines to recovery—were developed. AA has spawned Overeaters Anonymous, Narc-Anon for drug addicts, and many other twelve-step programs. In Germany, Hitler dealt with alcoholism by sterilizing 20,000 to 30,000 alcoholics.[12]

CCC: Civilian Conservation Corps—Paying People for Real Work

One of FDR's first priorities was to stabilize the economy. He immediately declared a "Bank Holiday" and closed every bank in the country until federal auditors could decide which ones were healthy. Deposits in the banks that reopened were insured up to $5,000 by a new agency, the FDIC—Federal Deposit Insurance Corporation. There were so many agencies that they were referred to only by their initials. These "alphabet agencies" had names like CCC and AAA.

On March 31, 1933, FDR signed the bill creating the Civilian Conservation Corps—the CCC. Its goal was to prevent the many angry, unemployed young men living in Hoovervilles and hanging around street corners from turning into gangs and revolting against the United States. Just as almost 2,000 years earlier, the Romans gave free bread and entertainment to the urban poor to avoid civil disorder, the Roosevelt administration got nineteen- to twenty-two-year-old men off the city streets and into the countryside. Soon, there were men in 1,450 CCC camps throughout all forty-eight states building roads, clearing trails, and planting trees. They were supposed to receive the standard army ration—twelve ounces of flour, ten ounces of fresh beef, ten ounces of potatoes, and five ounces of sugar per man per day—but army physicians increased it by five percent when they discovered that all the men were under-

MENU: CIVILIAN CONSERVATION CORPS[13]

Breakfast	*Dinner (Luncheon)*	*Supper*
Oatmeal	Roast Pork and Gravy	Braised Ribs of Beef
Fresh Milk	Baked Potatoes	Mashed Potatoes and Gravy
Fried Eggs and Bacon	Creamed Peas	Creamed String Beans
Hashed Brown Potatoes	Cabbage Slaw	Fresh Fruit Salad
Bread and Butter	Rice Pudding	Apple Pie
Coffee	Bread and Butter	Bread and Butter
	Coffee	Hot Cocoa and Coffee

nourished. The menu included a variety of foods, but the constants at all three meals were the basis of the typical American diet: meat, potatoes, bread, butter, coffee. Dairy products were also abundant in fresh milk, butter, creamed vegetables, and puddings. (Under "Fresh Vegetables" the army lists canned corn, green beans, and peas.)

The men had to send their pay home so their families could buy food and pay mortgages. Now these men and their families felt good about their country. So did the farmers who sold their food to the government.

AAA: Agricultural Adjustment Act—Paying People Not to Work

The problem with American farms was the same as with American industry—overproduction. Food cost very little. Shipping it, however, was expensive. It cost farmers in the Midwest more to ship their food to the cities than they could charge for it. They would lose money. So they destroyed the food. Newsreels showed farmers dumping gallons of milk, rivers of milk, into the gutter while hungry babies in cities cried and got rickets. Something had to be done. Roosevelt's solution was the AAA—Agricultural Adjustment Act. This revolutionary law paid farmers *not* to farm. They had to plow their fields under. The AAA was eventually declared unconstitutional and replaced with other farm subsidies.

The New Deal changed the relationship between the American people and their government profoundly. The government giving charity was contrary to the American idea of rugged individualism, that people would take care of themselves without help from anyone, especially the government. On the other hand, European countries where social welfare programs had existed for decades considered America backward and barbaric because it didn't have these programs.

The New Deal also changed the relationship between the government and black Americans. FDR immediately ended segregation in the White House, and his programs gave professional jobs to black people. The first lady, Eleanor Roosevelt, had many black friends and worked actively to help them achieve equality. She was also the president's "legs," going places he couldn't. There were jokes about Eleanor sightings, just as there are jokes now about Elvis sightings—Eleanor was spotted down a coal mine, up on a bridge being built, at a farm, in a school. But the Eleanor sightings were real; she *was* everywhere, making the federal government a living presence for ordinary Americans. She was more of a force in the life of America than any other first lady.

New Marketing Concepts to Sell Food

During the Depression, American ingenuity went into overdrive to come up with new ways to sell food. Apple sellers appeared on street corners

in cities. Little pieces of paper that told fortunes were baked into cookies in Chinese restaurants. Movie theaters started selling popcorn, and soon discovered that popcorn was more profitable than movie tickets.[14] Before that, going to a movie was like going to a play. The theater was an elegant "palace" with heavy velvet draperies and chair coverings, gold on the walls, elaborate paintings on the walls and ceiling. You did not eat. Theaters also had nights where they gave away dishes and other prizes. Drive-in movie theaters opened in 1933, with one giant speaker on top of the screen; neighbors were annoyed. Becoming more popular was another car culture creation, this one from the 1920s—the drive-in restaurant—with carhops who delivered food to your car door.



Art deco drive-in restaurant. *Courtesy Security Pacific Collection/Los Angeles Public Library*

Oregon fruit growers Harry & David used the United States mail to save their pear orchards and their business and became one of the largest mail-order shippers in the United States. During the 1930s, refrigeration advanced enough that walk-in refrigerators and freezers were invented, which revolutionized commercial food preparation and later, home food preparation.

The Joy of Cooking and Depression Cooks

After the stock market crash, many upper-middle-class women found themselves merely middle-class or worse. They suddenly had to live without household help, the maids and cooks on whom they had always relied. One woman who found herself in what was referred to then as "reduced circumstances" was a fifty-three-year-old widow of old German stock in St. Louis, Missouri. When she began collecting recipes from women friends and restaurateurs, her family called what she was doing a "hobby" or a descent into insanity, because they all knew "Irma can't cook." But Irma Rombauer persisted, and in 1931, using half of all the money she had, she printed 3,000 copies of *The Joy of Cooking*. Her daughter Marion Rombauer Becker, educated at Vassar and an artist, provided the illustrations. As Anne Mendelson, the Rombauer/Becker biographer, points out, Irma "hit on . . . a new way of writing recipes." Instead of listing the ingredients, then giving the instructions, Irma swirled them together like a marble cake:

"Sift ---------- 1/2 cup sugar
Beat until soft --------- 1/4 cup butter"[15]

The format was continued in following editions by her daughter and then her grandson Ethan Becker, a Cordon Bleu Cooking School graduate.

Another woman who turned her kitchen into a gold mine during the Depression was Margaret Rudkin. The Connecticut woman invented a special whole-grain bread for her son, who was suffering from allergies. Her bread developed a local reputation, so she placed it in stores. When bread was selling for a dime a loaf, Margaret insisted on charging a quarter and got it. That was the beginning of Pepperidge Farm.[16]

In Los Angeles, pies baked in her kitchen provided income for Marie Callender. In Texas, Cornelia Alabama Marshall realized that not everyone could afford her full-size pecan and fruit pies, so she loaded up her husband's truck with individual three-inch pies and sent him out to construction sites. The pies became known by her middle name—"Bama Pies"; she was "Gramma Bama."[17]

In 1935, a young man from Oregon with some college and a bit of experience as an actor needed to make money, so he began a catering a business. Two years later he opened a small shop called Hors d'Oeuvre Inc., and the rest, as they say, is history. James Beard published his first book, *Hors d'Oeuvres & Canapés*, in 1940. Beard published many books, including *Cooking It Outdoors*, the first cookbook that went beyond scouting or survival food and treated outdoor cooking seriously. He was also the first person to have a television show on cooking. James Beard died in 1985; it was Julia Child's idea to preserve his brownstone home in New York's Greenwich Village as a foundation to promote fine

food and drink, and as a memorial to the man known as the "Father of American Cooking."

Poisoned Food: Japan's Biological War Against China

The economy wasn't the only problem in the world in the 1930s. Japan's samurai rulers were proceeding unopposed with their goals of creating an empire. In 1907, Japan had moved into Korea, which it annexed in 1910, ending 500 years of Korea's Choson Dynasty.[18] In 1931, Japan invaded China, then escalated its attacks to all-out war in 1937. Japan intended to take China's massive natural resources, including food. The Japanese committed many atrocities, including the Rape of Nanking. In less than two months, the Japanese raped, dismembered, looted, tortured, and burned at least 100,000 people, most of them civilians. Japan denies this ever took place, even though they filmed it. In 2002, Japan opened a museum about World War II; it included nothing about Nanking.



Tea from a street seller in Manchuria, northern China. *Courtesy Library of Congress, Prints & Photographs Division, LC-USZ62-110728*

The Japanese used food as a weapon against Chinese civilians, including children. Japanese scientists put anthrax in chocolates and plague in cookies. They dumped typhoid down wells, sprayed fields with contaminated grains of wheat and millet, and released rats carrying plague fleas into cities. Chinese food customs—like fish peddlers who went from village to village—unknowingly helped to spread the diseases. Japanese doctors came to vaccinate people in the affected areas—but the "vaccines" were injections of cholera. They burned down villages and said they were cleansing them. They developed a concentrated version of toxin from the liver of the Japanese blowfish—*fugu*—to kill people, but a United States bombing raid destroyed the research facility. These tactics were extremely effective: six million Chinese civilians died.

1939

The last year of the decade ended with the best of events and the worst of events. The best: the New York World's Fair opened. Pavilion after pavilion displayed technological progress and the hope for a better life in the future. The French pavilion had a restaurant, called simply Le Pavilon, which was the latest in French food. After the fair closed, the restaurant went directly into New York City where it became a landmark for years and the training ground for many chefs, including the White House chef during the Kennedy administration.

The worst: in August 1939 Hitler and Stalin entered into a Non-Aggression Pact: neither country would attack the other. The two countries, very wary of each other, were separated only by Poland, which they both claimed. In effect, Stalin was giving Hitler the go-ahead to invade Poland. Britain and France, which had been counting on the threat of Russia to deter Hitler, were furious. They informed Hitler that if Germany invaded Poland, it would be at war with them.

WORLD WAR II

Germany invaded Poland on Friday, September 1, 1939, plunging the world into war again for the second time in a little more than two decades. England and France, true to their word, then declared war on Germany. The match was uneven. In defiance of the Treaty of Versailles, Germany had been preparing for war for the better part of a decade while England and France had not. The heart of Germany's industrial production, the Ruhr Valley, was dominated by the Krupp family. They began in the sixteenth century as manufacturers of cutlery who traveled from town to town peddling knives.

Germany easily took Poland, then overran Denmark and Norway. In Denmark, when they ordered every Jew to wear a yellow star, everyone,

including the king and queen, wore a yellow star. The Nazis continued west toward the Netherlands. As the Dutch army rushed to defend its borders, the Nazis attacked the interior of the country with a new kind of warfare, soldiers dropped from airplanes behind enemy lines—paratroopers. Overwhelmed, the Netherlands surrendered. Then Luxembourg. Then Belgium. In May 1940, France fell. For more than a year, England, the last country in Europe not under Nazi control, fought the entire Nazi Empire alone in Europe and in Africa, where the Nazis were trying to capture the Suez Canal and get to the oil in the Middle East. The United States helped England by providing ships, ammunition, oil, and food through the Lend-Lease program. Hitler was making plans to invade England and then the United States—right after he finished off Russia.

The Nazi Siege of Leningrad: "Starve Them"

The Nazis looked at the Slavic people of Russia the same way they looked at the Jews, as *untermensch*—subhuman. On June 22, 1941, the Russian people found out that Hitler had broken the Non-Aggression Pact when the German air force, the Luftwaffe, launched a *blitzkrieg*—a lightning strike—against the U.S.S.R. and destroyed almost their entire air force before it could get into the air. Then Germany invaded on the ground. By September 8, 1941, the city of Leningrad was surrounded and under siege. The Nazis used incendiary bombs to deliberately set the warehouses on fire and burn the food supply. Two thousand five hundred tons of burning sugar caramelized, flowed through the streets, then hardened. The government broke pieces off and sold the sugar in chunks.[20] The Nazi strategy: wait until winter, and let the people of Leningrad starve. Then they would surely surrender.

Hitler had a special interest in Leningrad: it contained the largest food plant seed bank in the world—more than 250,000 specimens. The seed bank at the Institute for Plant Industry was the life's work of Nikolai Vavilov, whose passion was to increase the world's food supply. Vavilov had gone backwards in the Columbian Exchange to pinpoint the origins of food. There, he reasoned, he would find other varieties of foods, ones that existed before humans engineered them into their current forms. He made more than 200 trips to remote areas on every continent except Antarctica to collect the seeds. With these, Hitler could control the world's food supply, and provide superfood for his Nazi supermen.[21]

December 7, 1941: Pearl Harbor

President Roosevelt told Japan to get out of China. When Japan didn't, the United States cut off Japan's oil supply. Japan's response was to bomb United States military bases in Pearl Harbor, Hawaii, on Sunday, De-

cember 7, 1941, shortly before 8o'clock in the morning. Pearl Harbor was only one prong in a multi-target attack. At the same time they bombed Pear Harbor, the Japanese also bombed the Philippines, Guam, Wake Island, Hong Kong, and other places in the Pacific.

A kitchen worker was one of the heroes of Pearl Harbor and the first African-American hero of World War II. Mess Attendant First Class "Dorie" Miller, a Texas high school fullback and heavyweight boxing champion on the U.S.S. *West Virginia*, manned a .50-caliber machine gun on the deck of the *West Virginia* and started firing even though he had not been trained to—the segregated armed forces taught only white sailors to use guns. Rumors spread that he shot down several Japanese planes, but Miller said he thought maybe he got one. He was awarded the Navy Cross for bravery. The African-American community wrote to President Roosevelt to have Miller admitted to the United States Naval Academy. It never happened. Miller was serving as Ship's Cook Third Class when his ship, the *Liscome Bay,* was torpedoed by a Japanese submarine and sank on November 24, 1943. Miller was awarded the Purple Heart after his death, and a ship named after him, the USS *Miller*, was commissioned in June 1973.[22] In 2001, the actor Cuba Gooding, Jr., played Miller in the movie *Pearl Harbor*.

Congress declared war on Japan on Monday, December 8, 1941. While they were debating whether to also declare war on Japan's allies, Germany and Italy, Germany and Italy declared war on the United States. Then the factories in the greatest industrial cities in the greatest industrial nation the world had ever seen—Detroit, Pittsburgh, New York, Chicago, Los Angeles—shut down. When they reopened, jeeps and trucks, not cars, drove off the assembly lines at General Motors, Chrysler, and Chevrolet in Detroit. Steel for battleships and bombers rolled out of the mills in Pittsburgh twenty-four hours a day, seven days a week.

When Pearl Harbor was bombed, Leningrad was deep in winter and its fourth month of siege. In January 1942, the bread ration dropped to four ounces per person per day. Two hundred thousand Russians starved to death. But they did not surrender.

Japanese in America: Executive Order 9066

The sneak attack on Pearl Harbor enraged and terrified Americans, especially on the west coast, where they were afraid the Japanese—none of them American citizens—would engage in sabotage to help Japan win the war. But the Japanese were in a bind: it was against the law in America at that time for anyone born in Japan to become a citizen, no matter how much they wanted to. President Roosevelt issued Executive Order 9066: arrest every person of Japanese ancestry, even children who were citizens because they were born in the United States. They were sent away from the Pacific coast to detention centers in remote inland

areas. Before the detention centers were ready, the Japanese in Los Angeles were kept in the horse stalls at Santa Anita Race Track near Pasadena. Japanese-Americans fought Executive Order 9066 all the way to the Supreme Court, which ruled against them in *Korematsu v. United States* in 1944.

One of the camps was Manzanar, in the Mojave Desert at the foot of the Sierra Nevada Mountains, which made escape nearly impossible. Some Japanese were sent to Indian reservations in Arizona; others to Wyoming. Japanese in Canada were sent to camps, too. Under American pressure, Peru's Japanese population—too close to the Panama Canal—was shipped to Texas. In the camps, these people, mostly farmers, continued to do what they had always done: grow fruits and vegetables which they ate and sold to the soldiers at the camp. Those born in Japan were required to sign a loyalty oath; some refused because they were afraid if the United States lost the war they would have no country at all. Many young Japanese-American men got out of the detention centers by joining the armed forces. The Japanese 442nd regiment fought bravely in Europe and became the most highly decorated unit in the American military in World War II.

Spam and the War Cake

The United States was wealthy in food. It sent its men into battle with what only a few years before had been a luxury item: chocolate candy. Sugar was rationed for home use, but was available for the commercial production of chocolate and soft drinks. Hershey and Mars got sugar; so did Coke and Pepsi. When Congress was on the verge of declaring the manufacture of candy illegal because it wasn't important to the war effort, Hershey convinced them that chocolate was crucial as a morale booster—it would remind the boys of home and what they were fighting for. So America's soldiers went to war and ate Hershey Bars and M&M's from Hershey's competitor, Mars.

Chances were good that the sugar came from sugar beets that were grown, cultivated, and harvested by Mexicans. With more than sixteen million Americans in the armed forces, farms needed laborers. The United States began the *bracero* (laborer) program (from *brazo*, the Spanish word for "arm") to bring back the Mexicans they had just deported. Under the *bracero* program, approximately four million Mexican agricultural workers came into the United States until the program was discontinued in 1964.

Soldiers on the front lines drank instant coffee made by twelve different companies in the United States, including Maxwell House and Nescafé.[23] It was fortunate that the men had coffee and candy, because they soon got tired of the main course in their army rations—Spam. During World War II, the United States government bought ninety percent

of everything the Hormel Company put in a can. Some of Hormel's products included Hormel Chile Con Carne, Dinty Moore Beef Stew, and canned hams. But the product most identified with Hormel was Spam. G.I.s ate Spam fritters, Spam soup, Spam sandwiches, Spam salad, Spam stew, Spam and macaroni, Spam and dehydrated eggs, Spam and dehydrated potatoes, Spam meatballs, Spam chop suey, Spam and Spam and more Spam. Every bit of Spam was used, including the packaging. The valuable metal in Spam cans was recycled as pots and pans and stills to make alcohol. Spam grease lubricated guns, conditioned skin, and became candles. There was so much Spam that soldiers called Uncle Sam, "Uncle Spam."[24]

Spam was also shipped overseas as part of the Lend-Lease program. In England, it was eaten by civilians in air-raid shelters and cleverly disguised under French sauces in fine restaurants. Europeans thought Spam was an acronym for "Specially Prepared American Meat."[25] In Russia, Spam fed the army. After the war, the Red Cross fed Spam to grateful, starving European refugees, who thought it was a luxury.

To help the war effort, the American government asked consumers to voluntarily cut back on their consumption of vital foods like meat. It had worked in England. But Americans are not British. They didn't cut back until laws set quotas and forced them to. In response to rationing, Americans did the same thing they did when Prohibition went into effect: they took their babies out of carriages, grabbed their children's toy wagons, went to the stores, picked the shelves clean, and hoarded. Then the slogan was: "Use it up, wear it out, make it do or do without." Some of the things Americans on the home front did without (or with very little of) were rubber, gasoline, sugar, butter, meat, milk, and eggs. Without rubber for their car tires, Americans didn't go on vacation. They did, however, go to the movies in record numbers, so popcorn consumption ballooned.

Nutrition became a matter of national defense. Men were "rejected for service with the armed forces because of faulty nutrition and thousands of man-hours are lost on the production lines for lack of proper food."[26] It was up to the housewives of America to change this and save the country—even though they might be working full time in defense plants themselves. Newspaper and magazine cooking columns invented recipes based on shortages. Meat was extended with eggs, bread stuffing, rice, and cereal. Recipes for pseudo-ethnic foods were supposed to tempt the palate: Italian Liver (tomato, green pepper, and mushroom sauce on spaghetti); Tamale Pie; Spanish Rice; Swiss Steak. For the truly desperate, there was "Gypsy's Joy," made of rice, water, bacon fat, condensed tomato soup, cooked ham, and "crumbled, nippy cheese."[27] Extensive use was made of macaroni: au gratin, loaf, ring, with spinach, in a casserole with fish and corn (fish was not rationed). Welsh "rabbit" made a comeback. Bacon fat was everywhere. Food writer Mary Frances

Kennedy (M. F. K.) Fisher wrote a book called *How to Cook a Wolf*, about how to make nutritious meals with limited items. Americans continued to discover that Italian food was cheap, nutritious, and delicious.

Not just what was prepared for lunch, but how it was packed was connected to national security: "Some defense plants insist on paper bags which can be inspected as they enter the plant . . . "[28] Housewives were urged to collect and recycle cosmetics jars, peanut butter jars, salad dressing bottles, cottage cheese and ice cream cartons to pack food along with the standard thermos bottle.

With sugar rationed, desserts were in short supply. In America's down-under allies, Australia and New Zealand, women baked ANZAC Biscuits—an acronym for Australia and New Zealand Army Corps. They were made of oats and flour, sweetened shredded coconut, and honey.[29] In the United States, some cooks used Coke and Pepsi as sweeteners: bake a cake, poke it full of holes, pour the cola in. "The War Cake" was made without butter, eggs, milk, or white sugar. It used brown sugar and water sweetened by soaking raisins in it, a technique used in the Middle East since ancient times. It tasted good and kept long enough to be shipped overseas to men and women in the armed forces.

RECIPE:

The War Cake[30]

2 cups brown sugar
2 cups hot water
2 Tablespoons shortening
1 teaspoon salt
1 teaspoon cinnamon
1 teaspoon cloves
3 cups flour
1 teaspoon soda
1 package seedless raisins [no weight or measurements given]

Boil together the sugar, water, shortening, salt, raisins and spices for five minutes. When cold, add flour and soda dissolved in a teaspoonful of hot water. This makes two loaves. Bake about 45 minutes in a 325°F. oven. This cake is of good texture and will keep moist for some time.

Even though American civilians struggled to come up with creative ways to make cakes without key ingredients, and American soldiers complained about having to eat Spam, Americans were lucky. None of World War II was fought in the United States, and nobody starved to death because of food shortages in America.

Prison Camp Food

The 140,000 men held prisoner by the Japanese would have laughed at rationing in the United States. The men were all severely malnourished and suffered from vitamin-deficiency diseases like beriberi, pellagra, scurvy; thousands died. In their weakened state they also got malaria, dysentery, cholera, and typhus. Some swelled up grotesquely, others went blind. Any small cut or mosquito bite could mean gangrene and death within days. The Japanese guards told the men their problem was that they needed to exercise more.[31] Scattered in camps throughout Asia, the prisoners—British, Dutch, Australian, American—worked at hard labor in salt mines or building a railroad in Burma (like in the movie *The Bridge on the River Kwai*). The United States Army ration for each enlisted man in peacetime was approximately four and one-half pounds of food per day. In combat, it was much higher. The official Japanese ration for prisoners of war doing strenuous physical labor was one pound, eleven ounces of food per day.[32] One bright spot in the months—for some, years—of imprisonment was when Red Cross packages arrived filled with food, cigarettes, and antibiotics. The men quickly traded items. Chocolate, tobacco, canned meat all changed hands. One food was almost never traded: cheese. The men had not had dairy in any form in so long, they craved it and held onto it. An exception: men who couldn't stop smoking starved to death because they traded their food for cigarettes.

In the United States, approximately 400,000 German prisoners of war were treated precisely according to the Geneva Convention of 1929, which stated that captured soldiers were to receive the exact same food that the capturing army fed its own troops. Troops were not subject to rationing; civilians were. So, during World War II, German prisoners of war in America ate better than American citizens.

The Hollywood Canteen

Hollywood actors and actresses volunteered their time and services to help the war effort. Male mega-stars like Clark Gable, Jimmy Stewart, and Tyrone Power joined the armed forces. Actresses flew across the country selling bonds. In Hollywood, some of the biggest stars could be found at night at the Hollywood Canteen handing out coffee and donuts and chatting and dancing with men in the armed forces. Black and white movie studio musicians played live music. These humane gestures escalated into political acts when word got out that there were "mixed" couples—blacks and whites—dancing together. There was talk of segregating the Canteen. That ended when two-time Academy Award–winner Bette Davis and John Garfield—major Warner Bros. stars and founders of the Canteen—said if that happened, the actors wouldn't come. With-

out actors, there would be no Canteen. So, unlike the armed forces in WWII, or nightclubs in the United States, the Hollywood Canteen was integrated.[33]

The "Final Solution"

In early 1943, Hitler put into effect his "Final Solution," the plan to kill all the Jews in Europe. When Hitler was asked how he thought he could get away with killing millions of Jews, he said, "Who remembers the Armenians?"—a reference to the hundreds of thousands of Armenians killed by the Turks in 1914–1915, and who had been largely forgotten by the world. Jews, gypsies, homosexuals, political prisoners, and Christian ministers were rounded up and shipped in boxcars without food, heat, or sanitary facilities to concentration camps throughout Europe. Twelve million people, including six million Jews, starved to death, died of disease, or were sent to the gas chambers in camps like Auschwitz in Poland. People who were ordinarily civilized and kind became concerned only with their own survival. The motto in the camps was: "Eat your own bread, and if you can, that of your neighbor." A sign that humanity was returning at the end of the war was when people started to share food again.[34]

In his zeal to kill Jews, Hitler had not forgotten to keep killing Slavs. Leningrad was still under siege. No animals were left in the city. The people had eaten all the stray cats, dogs, and birds. And their own pets.

The Greatest Tank Battle in History; Mass Starvation

In July 1943, on the flat fields of the Ukraine, near the town of Kursk, the greatest tank battle in history took place. For two weeks, the Germans and Russians fought each other with everything on wheels. The Russians finally emerged as the victors in what some historians consider the turning point of World War II, but it demolished the land that was the breadbasket not just of the Soviet Union, but of Europe.

In Leningrad, still under siege, starving people ate anything that offered any semblance of nourishment—leather shoes, briefcases, lipstick. They stripped wallpaper off plaster walls and ate the wallpaper paste. Then they ate the wallpaper. Then they ate the walls. But at the Institute for Plant Industry, they starved rather than eat the seeds.

As 1944 approached, millions of people were dying all over the world, many of starvation. In India, the British took rice to feed their troops fighting the Japanese in Burma; almost six million Indians starved to death or died from diseases brought on by malnutrition. In Japan, strict food rationing was in effect. They were also short on medical supplies, oil, and many other crucial items. In the Netherlands, Anne Frank, a fourteen-year-old Jewish girl in hiding with her family, wrote in her diary about the terrible monotony of their diet, which included slimy, very

old preserved cabbage. Other people in the Netherlands ate tulip bulbs boiled to mush or sliced and fried like chips. In England, children got their vitamin C from a syrup made out of rose hips.[35]

In Leningrad, people resorted to cannibalism. Children didn't dare go outside.[36] The siege finally ended in January 1944. The death toll from starvation was approximately one million people, one-third of the city's total population; more were killed by the bombs.[37] During all that time, the only ones who expected the people of Leningrad to surrender, the only ones who ever uttered the word "surrender," were the Nazis.

The Atom Bomb

In the United States, President Franklin D. Roosevelt died on April 12, 1945, and left his successor, President Harry S Truman, with a difficult decision. A plain-spoken man from Missouri, Truman's motto was, "If you can't stand the heat, stay out of the kitchen." The decision was whether or not to drop the new $2-billion weapon the United States had developed, the atomic bomb. Truman knew he was in the kitchen, and the heat was turned up full blast. On August 6, 1945, the United States dropped the first atom bomb on the city of Hiroshima, Japan. The center of the city was pulverized. Approximately 100,000 people were killed outright; thousands died later from the after-effects of radiation. When Japan's military leaders, with their samurai never-surrender philosophy, still didn't surrender, the United States dropped another atom bomb on Nagasaki on August 9. Several days later, Japan surrendered, ending World War II.

The airplanes that had dropped bombs began dropping crates of food. Some prisoners of war, so hungry, ate too much and died. Sometimes the parachutes on the 250-pound packages didn't open, and buildings and people were destroyed. One of the last American casualties of World War II was a marine killed by flying Spam.[38]

POST–WORLD WAR II AND THE COLD WAR

World War II caused a major shift in global politics and economics. The United States, England, and Russia had used American oil in eastern and western Europe, Asia, Africa, and the Pacific and Atlantic oceans to fly airplanes, run tanks, trucks, and jeeps, and sail ships. After World War II, the United States was still producing oil, but not enough to meet its needs. The world's attention shifted to the area that was rich in oil—the Middle East—especially the countries of Iran and Saudi Arabia. At the same time, the U.S.S.R. and the United States, countries that had been uneasy allies in World War II, became bitter enemies, especially after the U.S.S.R. exploded its own atom bomb in September 1949. In Oc-

tober 1949, Mao Zedong triumphed over Jiang Jieshi in China's civil war and announced that the most populous country on earth—500 million people, one-fourth of all the people on the planet—was now the communist People's Republic of China. Thousands of Chinese fled Communist China and went to the island of Formosa, now called Taiwan.

This was the Cold War between two different political and economic systems, democracy and capitalism versus communism. It consisted of a massive military buildup including nuclear weapons and espionage. Americans dug bomb shelters in their yards and stocked them with canned goods just in case the Cold War heated up.

The Russians took heavier casualties in World War II, both military and civilian, than any other country. About twenty million people had died, either killed in the war or by starvation. (In comparison, about 290,000 Americans died in the war.) In the Russian countryside, more than half the horses were gone; only three million pigs were left out of twenty-three million. Almost five million houses were destroyed, as well as hundreds of thousands of tractors and wagons and thousands of farm buildings.[39]

The United States poured millions of dollars into European countries, especially Italy, France, and Greece, to help them recover and to keep them from becoming communist. The American Army brought a new word into the Italian language: *ciao*. It is pronounced "chow" and means "hello" or "goodbye." It came into use after World War II, when starving Italians begged for food from American soldiers and knew only the one word of English they heard soldiers say when they went to eat—"chow."

Food had become a political issue in Italy in the 1930s when the fascist dictator, Mussolini, declared pasta passé because it was making Italians soft and sluggish. Mussolini's New Roman Empire needed new foods to make its people strong and hard. A huge debate arose all over Italy. The keep-the-pasta movement was supported with protests and petitions. Others wanted the new cuisine, dishes with names like "Raw Meat Torn by Trumpet Blasts" and "The Ox in the Cockpit." Finally, a conference of chefs was held to decide the issue for the culinary community; what the chefs decided was to beat each other up.[40] At the end of the war, an Italian mob killed Mussolini and hung him from a lamppost on a butcher's meat hook.

The period immediately following World War II saw a move for independence in colonial countries. In India, devastated by famine and disease, the Indian army followed Indian officers who wanted independence from Britain. A religious leader, Gandhi, used the same tactic to gain independence from England that Americans had used almost 200 years earlier: a boycott of British goods. One of these was salt, because England had a monopoly on salt production in India. From 1930 to 1932, Gandhi had led hundreds of thousands of Indians to the sea on Salt Marches. Getting salt by evaporation from the sea broke the law—and the monopoly—and encouraged the Indian people to engage in other acts of civil disobedience until they were granted their independence in 1947. Fighting

immediately broke out between Hindus and Muslims until the new country of Pakistan was created as a Muslim state. Gandhi tried to make peace, but was assassinated by a Hindu who thought he was too pro-Muslim. In the Pacific, the Dutch granted Indonesia independence in 1949.

For the sixteen million Americans in the armed forces returning home, many wanted to change jobs. Some had discovered during the war that they had a talent for cooking. In 1946, the cooking school that became The Culinary Institute of America was founded in New Haven, Connecticut.

Food Fable

AMERICAN SOLDIERS AND WORLD WAR II FOOD

The myth was that American soldiers, impressed by the food they were exposed to in European countries, especially Italy and France, came back to the United States eager to eat more of it. This would be inaccurate. During and after the war, there were tremendous food shortages in Europe. The food exchange went from Americans to Europeans, not the other way. The Italian food that G.I.s had been exposed to, many for the first time, was given to them by the army—canned Chef Boyardee spaghetti.

Also in 1946, an American woman from Pasadena, California, a graduate of the Smith College class of 1934, went with her husband to Paris, where he was stationed at the American Embassy. She went to the Cordon Bleu cooking school there and became fascinated with French cooking. She wanted to spread the word on how good French food was and show Americans how to make it. And that is exactly what Julia Child did when she returned to the United States.

The Cold War heated up and became a shooting war (called a United Nations "police action") in Korea from 1950 to 1953 (the subject of the movie and TV series *M*A*S*H*). This caused a huge buildup of the military in the United States that continues to the present.

Korean Cuisine

Rice is the staple of Korean cuisine. Glutinous lowland rice, *tapkok*, is eaten. An upland variety is used for flour and beer. Flour is also made from ground mung beans. The staple condiment and national dish, which comes in more than 200 varieties, is kimchee. It is traditionally made every fall—cabbage season—in Korean homes. Cabbage (and sometimes Asian daikon radishes), onions, ginger, chili powder, and garlic are packed into

stone crocks and fermented. Near the ocean, kimchee might include pickled, salted, or fermented seafood like oysters and shrimp. Inland additions are spinach, pumpkin, cucumber, and mustard greens.[41] What Americans know as Korean barbecue is *pulgogi*—meat or seafood marinated in soy sauce, sesame oil, garlic, ginger, pepper, and green onions, then broiled. Wheat or buckwheat noodles or dumplings like wontons but larger are served in soup. Soup provides the liquid during a meal; beverages like rice water or barley water are consumed after. What Americans would consider dessert—rice cakes or fruit—is eaten between meals as a snack.

The Koreans, like the Japanese, are formal people. There are many rules controlling relations between people and regarding food. Koreans consider it rude to look people in the face while speaking to them or to compliment anyone, like the cook, directly. It is more polite just to say that the food is good. Elders are deeply respected. They are spoken to first, served food and drink first, and eat first. No one can begin eating until the oldest person does. Dining tables are low; diners sit on cushions on the floor. The service is *à la française*, with all courses presented at once. Chopsticks and spoons are the utensils. Fingers are never used. The meal is over when the oldest person is finished. When dining out, Koreans never split the bill or ask for separate checks. The entire bill is paid by the person who had the idea to go out.[42]

THE FAST-FOOD FIFTIES

"Better Living through Chemistry" was the slogan in the 1950s, along with "I Like Ike," which referred to five-star general Dwight D. Eisenhower, who led the Allies to victory in World War II and the Republicans to victory at the polls, serving as a two-term president from 1953 to 1961. After World War II ended in 1945, men returned from overseas, women gave up their factory jobs, and they proceeded to do things in record numbers: get married; move to the suburbs into houses built on what had often been farmland and financed by new government programs for veterans like the G.I. Bill; buy cars; buy new appliances like stoves, refrigerators (twenty million in one five-year period), dishwashers, washing machines, dryers, backyard barbecues (really grills), and the new home freezers invented by Amana.

They also bought televisions in record numbers and watched shows that reflected an idealized version of their prosperous new life. In *Father Knows Best*, *Ozzie and Harriet*, and *Leave It to Beaver*, Mom, freed from household drudgery by her new appliances, was serene and perfectly dressed and put meals on the table with no trouble. In 1959, an entire episode of the popular TV show *Lassie,* about a collie dog and the rural family she lived with, dealt with "The New Refrigerator." Mother is dy-

ing to get rid of the old ice box, with its "dripping pan" and "no room." There is a linguistic shift as they remind each other to call the new appliance by a new word—*refrigerator*. After Father brings the refrigerator in and plugs it in, the whole family stands around looking at it, beaming and listening to the motor. Almost moved to tears, mother caresses it and says, "Let others have their mink coats." The refrigerator also changes their relationship with the man who delivers ice to the house. Now they will see him only when he brings coal and oil in the winter.

Post-WWII Americans also had children in record numbers—fifty million from 1945 to the end of the 1950s. This "Baby Boom" resulted in food marketing aimed specifically at children. In 1951, Tony the Tiger appeared to sell breakfast cereal. Flaked fish sticks transformed fish into finger food, appealing to children. Adults continued eating the foods they had been served in the armed forces: instant coffee and Spam.

At about the same time, another legend was born. This one was totally fake, but caught on and is celebrated around the world now.

Holiday History

ST. URHO'S DAY, MARCH 16

In 1956, Richard Mattson, a Finnish-American in Minnesota, got tired of listening to his Irish-American friends sing the praises of their patron, Saint Patrick, and how he drove the snakes out of Ireland. So Mattson made up a Finnish saint, St. Urho, who drove the frogs out of Finland and saved the grape harvest (a real feat—Finland is as far north as Alaska). Nevertheless, the story caught on, with the frogs changed to grasshoppers (perhaps because of the grasshopper plagues in nineteenth-century Minnesota). St. Urho's colors are green for the grasshoppers and purple for the grapes. His day is March 16, purposely beating St. Patrick by one day.

Special foods connected with St. Urho's celebration include real grasshoppers in cookies, caramel corn, fritters, and enchiladas (perhaps for those from southern Finland). There is also *kalamojakka*, a Finnish fish and potato stew, which the saint ate every hour to keep up his strength while fighting the grasshoppers. The St. Urho's Grasshopper drink is made with green crème de menthe, white crème de cacao, and Finlandia vodka. The festivities include parades, songs, poems, polkas, statues, and chants of St. Urho's curse: "*Heinäsirkka, heinäsirkka, mene täältä hiiteen!*" ("Grasshopper, grasshopper, go to hell!"). For more, check out http://sainturho.com/.[43]

TV Dinners and Jiffy Pop

Fast food and frozen food combined in 1954, when Swanson introduced TV dinners—completely frozen, pre-cooked meals that only needed to

be reheated. For ninety-nine cents, the consumer got an aluminum tray divided into compartments with an entree, vegetables, and dessert. As more people stayed home to watch television, movie attendance dropped and so did popcorn consumption. Popcorn producers retaliated with Jiffy Pop—pre-packaged and oiled popcorn in an old-fashioned style popper with a handle—for the home audience. In 1955, the principle of the assembly line finally came to food when milkshake salesman Ray Kroc bought the McDonald brothers' hamburger stand in San Bernardino, California. Down the street was the restaurant that became Taco Bell. Disneyland also opened in July 1955 and was so successful that they ran out of food on the first day.

Civil Rights: The *Brown* Decision; Cesar Chavez

Civil-rights advocates had been using lawsuits to chip away at segregation in the United States. They were aided by black athletes whose talents were so spectacular they could not be ignored. Jesse Owens ran like the wind at the Nazi Olympics in Berlin in 1936 and won four gold medals. In 1938, the phenomenal fists of Joe Louis, the Brown Bomber, beat Germany's Max Schmeling for the world heavyweight boxing championship. And in 1947, UCLA graduate Jackie Robinson integrated baseball when manager Branch Rickey put him on the Brooklyn Dodgers (they didn't move to Los Angeles until the mid-1950s). The Tuskegee Airmen, black pilots, also served with distinction in World War II.

In the South, discrimination continued after World War II. In restaurants, the front of the house was segregated, but blacks still did the cooking and serving. Blacks felt that they had served their country honorably and risked their lives and should be treated equally. In 1948, one veteran, wearing his uniform and war medals, refused to move to the back of the bus. White men pulled him off the bus, beat him, and blinded him. An angry President Truman picked up a pen, issued an Executive Order, and integrated the army.

In 1954, the NAACP and others in the civil-rights movement brought a case before the Supreme Court. In a rare unanimous decision in *Brown v. the Board of Education of Topeka, Kansas*, the Supreme Court justices stated that segregation was wrong. Period. Then they ordered that schools be integrated. The South resisted. The governor of Alabama said, "Segregation today, segregation tomorrow, segregation forever." It was going to be a long fight.

Another group was fighting for survival, too. The plight of migrant workers was shown to Americans in "Harvest of Shame," a CBS-TV documentary that aired, deliberately, the day after Thanksgiving in 1960. Narrated by respected newsman Edward R. Murrow (who was the subject of the 2005 movie *Good Night and Good Luck)*, it showed the de-

plorable conditions under which migrants worked for $900 per year. One thing that made their lives so difficult was the short-handled hoe. The twelve- or fourteen-inch handle forced workers to literally bend in half for up to twelve hours a day out in the fields. At the end of the day it was nearly impossible to stand up. There was also no place for workers to go to the bathroom. A leader emerged. Cesar Chavez forged a political movement of migrants and appealed to the American public to boycott table grapes (not wine grapes) and lettuce until those producers provided more humane working conditions. Chavez had a slogan: *Si se puede*—"Yes, we can." And they did. Cesar Chavez Day is celebrated in California on March 31.

The Cuban Revolution: Castro and Rum, 1959

On New Year's Eve, December 31, 1958, Cuban revolutionary Fidel Castro finally succeeded in overthrowing the government. Dictator Batista had been very friendly to American businesses, including organized crime and the casinos and other operations they ran. This is captured on film in *The Godfather II*, when the representatives of organized crime and American corporations literally cut up a cake in the shape of Cuba and hand out pieces. Castro also nationalized the rum industry, which means that the country took it by force. The Bacardi family fled to Puerto Rico. When Castro came to power in 1959, he promised free elections. The Cuban people are still waiting.

Many of them—the educated, upper classes—moved to America after the revolution and brought their cuisine with them. Like other Caribbean countries, the staples are black beans and rice, and plantains. Cubans also love pork marinated in vinegar and orange juice and stewed with onions; chicken roasted with garlic; and tropical fruit drinks, especially with rum.

Hawaii Becomes a State; the Puu Puu Platter

Hawaii became a state in 1959. Alaska joined in 1960, making a total of fifty stars on the American flag. Mainland Americans suddenly "discovered" the tropical Hawaiian islands, 2,500 miles away. James Michener's bestselling novel, *Hawaii*, became a blockbuster movie in 1966. A 1970 sequel, *The Hawaiians*, in a moment of deep fiction, showed Academy Award–winner Charlton Heston changing the economy of Hawaii forever by stealing the pineapple from South America in the nineteenth century and bringing it to Hawaii. In reality, pineapples came to the Pacific with Captain Cook in the 1770s. Hawaiians began canning them in 1892. (They were grown in Europe shortly after Columbus found them on Guadeloupe in 1493.) Elvis Presley visited *Blue Hawaii* in 1961 and

returned to enjoy *Paradise Hawaiian Style* five years later. On television, the islands provided exotic scenery for three series: *Hawaiian Eye* (1959 to 1962), *Hawaii 5-0* from 1968 to 1979, then *Magnum, P.I.* in 1981. The main characters were *haoles* (HOW lees)—white people—with Asian locals taking a distant second place or absent.

Haole Mark Twain visited Hawaii—then called the Sandwich Islands—in the 1860s when there were still people alive who remembered native life and customs before missionaries arrived in the 1820s and converted them to Christianity. Dogs were raised for food and prized; 300 were sacrificed when King Kamehameha died in 1819. The dying king had to be carried from the house he slept in to the house where he ate because eating and sleeping in the same building was taboo. His wives had to eat in a separate house.[44] It was also taboo for women to eat bananas, pineapples, or oranges; the missionaries changed that.[45] Twain tried a cherimoya ("deliciousness itself"); a tamarind ("sour"); and saw natives eating raw fish ("Let us change the subject!").[46] In the marketplace he saw poi, a staple Hawaiian starch that "looks like common flour paste," and was kept in four-gallon bowls made of gourds. The natives "bake it [taro root] underground, then mash it up well with a heavy lava pestle, mix water with it until it becomes a paste, set it aside and let it ferment, and then it is poi."[47] It was eaten by sticking a forefinger into the bowl.

In the 1920s, 100 years after the religious missionaries came to Hawaii, food missionaries—home economists from Columbia Teachers College in New York City—introduced standard American food to Hawaiian schools: ground beef in the form of hamburger, meatloaf, and Salisbury steak.[48] Hawaiians refer to themselves as "locals" to distinguish themselves from *haole* missionaries and tourists. "Local Food" is their fusion of native, Japanese, Chinese, Filipino, Pacific Islander, and American cuisines. Rice is a staple starch. A whole pig marinated and roasted underground is the centerpiece of the luau. Spam appears in its Japanese form as Spam sushi and Spam tempura; in its Chinese form as Spam wonton; and in its Filipino form as Spam lumpia. As food historian Rachel Laudan notes, "in Hawaii Spam continues to be something to be reckoned with."[49]

Hawaii is part of Polynesia, part of what are now called the Pacific Islands: the Marianas, the Solomons, Guam, Fiji, Samoa, New Caledonia, the New Hebrides, and others. In the 1950s and 1960s, something that claimed to be Polynesian food appeared in American restaurants. Sweet, fruity drinks were garnished with small, colorful, paper umbrellas. The puupuu platter was an excuse to deep-fry food and smother it in canned pineapple chunks, maraschino cherries, and corn syrup. Real Polynesians eat food steamed or baked in banana leaves; taro, poi, yams, plantains, coconut, and fresh tropical fruit. They also eat fried forest rat and insects. The stewed flesh of fruit-eating bats (*civet de roussette*) is regarded as such a delicacy that some species are near extinction.[50]

In the 1950s, Americans began a love affair with things Italian and French. On one of America's most popular television shows, *I Love Lucy*, Lucy and her real-life and television husband Ricky went to Europe. Lucy got more "local color" than she bargained for when she climbed into a wine vat to stomp grapes with her bare feet and ended up in a wrestling match with a strong, angry Italian woman. *Roman Holiday* (1953) was about a runaway princess; even ancient Rome was featured in a series of movies about the Roman Empire, including Shakespeare's *Julius Caesar*. Italian movie stars Sophia Loren and Anna Magnani were so well-liked by American audiences that they won Academy Awards for Best Actress.

France was equally photogenic. *An American in Paris*, about an American G.I. who stays in Paris to paint after the war, won the Academy Award for Best Picture in 1951; in *Sabrina* (1954), the plain-Jane title character went to a cooking school with a view of the Eiffel Tower and came back looking like a *Vogue* model—and she could crack an egg one-handed. *To Catch A Thief*, directed by suspense master Alfred Hitchcock in 1955, showed the glories of the French Riviera. It also had dialogue that was very suggestive for the time: gorgeous Grace Kelly asks Cary Grant if he wants a breast or a leg—but all she's offering him is chicken. Brigitte Bardot, the French "sex kitten," popularized the new bikini bathing suit. Americans went on whirlwind tours through Europe, where the dollar was strong.

Fine Dining: Life as a Work of Art

In France, a new style of cooking was developing throughout the 1950s and 1960s. Its leading chefs were Ferdinand Point, Paul Bocuse, Michel Guérard, Jean and Pierre Troigros, and Alain Chapel. This new style altered the *grande cuisine* of Escoffier in several ways. It broke the three-century-old tradition of relying on roux as a thickening agent and used lower-fat stock reductions instead. Escoffier's parsley garnish was gone. Presentation was Asian-influenced and asymmetrical, with the focus on color, texture, size, shape. Food was "art on a plate."

The great American architect Frank Lloyd Wright believed in life lived as art, too. At Taliesin, the school he founded in Spring Green, Wisconsin, it is the job of one student to get up early every morning and create a work of art for the others. This work of art is composed of furniture, napkins, cups, and saucers. The tables in the dining room are a variety of shapes, like tinker toys: round, square, rectangular. The student arranges them in a new design, chooses napkins and placemats, picks wildflowers in season. This way, first thing every day, everyone is stimulated and challenged by new shapes, forms, colors, textures. And that's *before* the food. It is an old concept that is still new and meaningful.

In 1973, two food critics, Gault and Millau, gave the new cooking a name—*Nouvelle Cuisine*. Again.



Twelfth Course

Revolutions in Cuisines and Cultures: FROM "BON APPÉTIT" TO "BAM!" THE 1960s INTO THE NEW MILLENNIUM

THE SIXTIES: REVOLUTIONS IN COLOR

The 1960s was a decade of political, social, and technological upheaval throughout the world. People protested civil rights and social injustices, and the war in Vietnam, a former French colony. It was a social revolution that changed the way history was written and changed food writing, too. Before the 1960s, most history was "from the top down" or "great man"—about what important people, usually white men, had done. In the 1960s, people of other races, classes, and genders began writing their own history "from the bottom up"—about how the masses of ordinary people had changed history, too.

"Black Is Beautiful"

African countries revolted, shaking off their colonial masters. And African-Americans pointed out that 100 years after President Lincoln freed the slaves in the Civil War, they still couldn't vote, serve on juries, attend schools with white people, or sit at public lunch counters. In 1963, hundreds of thousands of Americans of all races, ages, and gen-

ders marched at the Washington Monument and heard the Reverend Dr. Martin Luther King tell the world, "I have a dream" that people will be judged by what's inside them, not by the color of their skin, while millions more saw him on television. Black men shook off a hundred years of being insulted by being called "boy" and started addressing each other as "man." The new slogan for black pride was "Black is beautiful." Because of the Civil Rights movement, advertising icons like Aunt Jemima and Uncle Ben got face-lifts to look more like professional people and less like happy slaves.

Americans continued their love affair with speed in cars, airplanes, and food. At first, if you wanted food you had to go to a restaurant. Then you could call ahead and the food was ready when you got there. At some restaurants, you didn't even have to go inside—there was a drive-through window. In the 1960s, food got even faster—the restaurant came to you. Domino's Pizza was the first fast food delivered to your door. And Julia Child came to your television.

Cordon Bleu and White House—Julia Child and Jackie Kennedy

In 1961, after years of writing and recipe testing, and eleven years after graduating from the Cordon Bleu, Julia Child, along with Simone Beck and Louisette Bertholle, wrote *Mastering the Art of French Cooking*. It revolutionized Americans' relationship to food, especially French food. Julia Child's purpose was to take the mystery out of French cooking, to make it accessible to anyone in America, and she did. The kitchen on Julia Child's television program looked like an average American kitchen because it was hers, designed by her husband Paul. She cooked on an electric stove top, used average kitchen knives and ingredients that could be found in any American supermarket. Quiche and other French foods became extremely popular.

In 1963, Julia Child revolutionized the teaching of cooking when she appeared on Boston's public broadcasting station WGBH as "The French Chef." In 1966, her picture was on the cover of *Time* magazine, which called her "Our Lady of the Ladle." The television programs *Julia Child and Company*, *Julia Child and More Company*, and *Dinner with Julia* followed. In 1981, she was one of the founders of the American Institute of Wine and Food (AIWF). In 1989, she wrote *The Way to Cook*, the first cookbook offered as a main selection by the Book of the Month Club. She was one of the founders of the James Beard Foundation and, with Jacques Pepin, of the new culinary history program at Boston University. Her name is on an award for Best Cookbook given by the International Association of Culinary Professionals (IACP), which she also helped to found. Her numerous books are on the shelf of every professional and amateur cook in America. Her kitchen is at the Smithsonian

National Museum of American History. Her pots and pans are at Copia, the American Center for Wine, Food, and the Arts. Her generosity and commitment to food were everywhere.

Although Julia Child made it possible to cook French food without special equipment, a hardware store owner in Sonoma, California, north of San Francisco, liked special equipment. Chuck Williams went to France and brought equipment back to his store. It was immediately popular, so he opened another one, in Beverly Hills, then more. As a character on a television show remarked, "Once you've discovered fire, it's just a short hop to Williams-Sonoma."[1]

French food reached Washington, D.C., too, in 1961, when John Fitzgerald Kennedy (JFK), the young, good-looking Harvard-educated, Irish Catholic senator from Massachusetts, and his wife, Jacqueline Bouvier Kennedy, became president and first lady. The White House became a social focal point of the United States. The Kennedys hired a chef who was trained in classical French cooking, René Verdon. Jackie, as she became known, was of French descent and had spent her junior year at Vassar in France. When the couple attended state dinners in France, she spoke to the guests in French; when they went to South America, she gave speeches in Spanish. Unfortunately, the First Lady was not fluent in German, so when Kennedy went to Berlin and gave a speech to show solidarity with the people of Berlin, which had been split into two cities by a wall the communists built, he said, "*Ich bin ein Berliner*." He thought he said, "I am from Berlin," which would have been "*Ich bin Berliner*"; what he really said was, "I am a Berliner"—which is a jelly doughnut.

The Green Revolution—Farming

In the 1960s, overabundance caught up with Americans—obesity became a problem. Weight Watchers held its first meeting in 1963. Other diet organizations followed: Overeaters Anonymous, patterned after the Alcoholics Anonymous program; Australian Jenny Craig; a Christian Weigh Down Diet, which urged its members to get "slim for Him."[2] Millions of Americans were going to health clubs and drinking diet soda—Diet-Rite, Tab, Diet Pepsi, Fresca. In 1975, dieting even reached beer when Miller introduced Lite Beer. The slogans were "Thin is in" and "You can't be too rich or too thin"—except for the increase in eating disorders first identified in the nineteenth century, like anorexia nervosa and bulimia.

However, millions of people in the world were starving. The industrialized nations saw food as an issue of national security: underfed populations in other countries could revolt and change the global balance of power. Science had nearly wiped out malaria by spraying with DDT, invented a liquid vaccine that prevented polio, and cured infections with antibiotics like penicillin and sulfa. After these medical miracles, what

was left? Miracle food—genetically engineered soy, and dwarf rice that had a short growing time, a phenomenal yield, and would grow anywhere in Asia would stamp out famines like the one that killed approximately twenty million people in China between 1958 and 1961.[3] The United States, the largest grower of rice in the world, built the International Rice Research Institute in the Philippines. In 1965, Ferdinand Marcos was elected president of the Philippines on the slogan, "Progress is a grain of rice." The technical name of the rice was IR8, but it was called *Than nong*, after the Vietnamese god of agriculture. It not only grew much faster, so it could produce two crops each year, it also yielded more rice per plant. This was the beginning of the Green Revolution, the plan to feed the world by applying science and genetic breakthroughs to farming.

The Blue Revolution—Aquaculture

The same intensive farming was taking place in the water, with salmon, shrimp, mussels, tilapia, and trout. Aquaculture, too, had its proponents and opponents. Supporters claimed that fish farming would increase yield and help feed the world. Opponents pointed out that farming some fish—like salmon, which eat other fish—disrupts ecosystems as smaller fish do not provide food in their own ecosystem because they are captured to feed larger fish somewhere else. Opponents also question the quality of the farmed fish, which become fatty swimming in pens instead of the ocean, and have to be dyed to look the way they do in the wild. Nevertheless, fish farming "is probably the world's fastest growing form of food production. . . . Some people believe that, by 2030, aquaculture will supply most of the fish people eat."[4]

The Anti-White Revolution—Counterculture Cuisine

The social revolutions of the 1960s included food revolutions. In 1962, with the publication of biologist Rachel Carson's book *Silent Spring*, about the consequences of using pesticides, some people began eating with a consciousness about the environmental consequences of where their food came from and how it was produced. The new buzzword was *ecology*—recognizing that all living things were connected. In a "Back to Nature" movement, some Baby Boomers revolted against industrialization by living on communes patterned after Israeli kibbutzim and doing manual labor. They grew fruits, vegetables, and herbs, milked farm animals, and in a gesture of political solidarity with nature and the civil rights movements, revolted against white things, especially white foods: "Minute Rice, Cool Whip, instant mashed potatoes, white sugar, peeled apples . . . and, of course, Wonder Bread." Instead, they baked bread with whole grains, ate brown rice and brown eggs.[5] Corporate respon-

sibility and accountability were born here, too, as the Baby Boomers demanded to know which corporations had ties to the military-industrial complex and the Vietnam War.[6] When this counterculture cuisine crossed over to the cities, it took the form of salad bars, herb tea, and whole grain bread. In the language of the 1960s, this "raised the consciousness" about environmental issues—so much that Earth Day was first celebrated on April 22, 1970. By the 1970s, corporate food producers, restaurants, and supermarkets realized that there was money in counterculture cuisine.

Space-Age Technology

In 1969, at the same time that the "back to nature" movement was growing, technology put American astronaut Neil Armstrong on the moon. Space-Age technology changed American kitchens. WWII radar led to the microwave oven. The Raytheon Company produced the first commercial one in 1947, the Radarange. Like the first computers, which filled an entire room, these early microwaves were enormous. Tappan's first domestic model, in 1952, "stood five and a half feet high . . . [and weighed] 750 pounds." And cost thousands of dollars. It was not until 1967 that Amana sold a viable microwave for home use at $495. By 1975, microwaves "outsold gas ranges."[7]

Tang—powdered orange juice—went into space with astronauts and into American kitchens. A revolutionary new line of popular cookware was advertised as being made of the same material as rocket nosecones. Corning Ware, introduced in 1958 by the Corning, New York, Glassworks Company, could go from freezer to oven to direct stovetop flame without cracking or burning. The white square or rectangular pans with the little blue cornflower design looked good enough to double as serving dishes, then you popped them into the dishwasher.

THE SEVENTIES: FOOD REVOLUTIONS

California Cuisine—Alice Waters

If California were a country, it would be the fifth richest one in the world, after the United States, Japan, Germany, and England, and ahead of France, China, Italy, Canada, and Brazil. The tenth wealthiest economy in the world is southern California, ahead of Mexico and the remaining countries in the world. California, with an annual economy over $1 trillion, has more people than any other state in the United States[8] and the most abundant food-producing area in the world—the vast Central Valley that runs north and south, half the length of the state, between the coastal mountain range and the Sierra Nevada mountains.[9]

In 1971, a landmark in the history of food took place in Berkeley, California—Alice Waters opened Chez Panisse restaurant. Panisse was a man with a small restaurant that is the heart of the town because of his unconditional love in the French film *Fanny* (1961), a remake of a 1932 movie that was part of a trilogy, based on books. The movie takes place in Provence, the home of the cuisine that inspired Alice Waters. Like other famous food people, Waters didn't start out intending to have a career in food. She was a kindergarten teacher who went to France and fell in love with the country and the food. When she found mesclun salad greens, she brought the seeds back and grew them herself. She was also inspired by British writer Elizabeth David's passion for Mediterranean cooking, her desire to bring the "flavour of those blessed lands of sun and sea and olive trees into . . . English kitchens."[10] In turn, Waters influenced another generation of chefs and food producers like Mark Miller, Lindsey Shere, Wolfgang Puck, and Francis Ford Coppola.

Another food landmark occurred in 1971, also on the west coast. Three friends got together and opened a coffeehouse in Seattle, Washington. They named it after a character in Herman Melville's nineteenth-century novel about an obsessed sea captain's hunt for a great white whale, *Moby Dick*—Starbuck's.

Spa, *Minceur*, and Vegetarian Cuisine

Nouvelle Cuisine, pared down even more and stripped of fat, resulted in super-lean cuisines like spa cuisine and cuisine *minceur* (French for "lean cuisine"). Many people thought that cutting out fats was the way to immortality. Nathan Pritikin, who ran the Pritikin Longevity Center near the beach in Santa Monica, California, touted the physical benefits of eating no fat and jogging. In 1983, *The Pritikin Promise: 28 Days to a Longer Life*, became a *New York Times* bestseller. The Pritikin diet allowed no fat, sugar, or oil. Around the same time, a young medical doctor, Dr. Dean Ornish, had an idea that patients recovering from heart attacks and surgery would do better and with less medicine if they changed their diets drastically. He contacted a food writer, Martha Rose Shulman, who came up with "heart healthy" recipes. The pilot program was a great success. The American Heart Association adopted the concept and soon restaurants were sporting menus with a ♥ next to the healthy approved dishes. Shulman went on to write many other cookbooks, like *Mediterranean Light* (Martha-Rose-Shulman.com). Spas like the Golden Door north of San Diego, California, founded in 1958 (the same year as the Barbie doll), provided very low-calorie cuisine based on organic fruits and vegetables from their own gardens prepared by classically trained chefs. In 2006, the Golden Door's weekly rate was $7,500. Spas designed around feng shui used herbs and vegetables like carrots, lemon grass,

ginger, and mandarin oil (sometimes organic) for facial masks, body wraps, and massages. Farmers' markets and food festivals sprang up all over the United States in response to the demand for the freshest ingredients. In 1990, California passed the toughest organic food law in the United States.

In 1973, the Moosewood Restaurant, a collectively owned vegetarian restaurant, opened in Ithaca, New York. The food and the seasonings made vegetarian cooking exciting, spicy, and ethnic. Cookbooks like *The Moosewood Cookbook*, *The Enchanted Broccoli Forest*, and others followed. They gave vegetarianism a new taste and reinvigorated a movement that had been out of fashion since the end of the nineteenth century.

At the other end of the food spectrum were desserts. In 1977, a woman opened a store in Palo Alto, California, in spite of having been told by everyone that she could never make a living selling nothing but cookies. Mrs. Fields proved them wrong. The following year, two friends learned how to make ice cream through a correspondence course from Pennsylvania State University and converted a run-down gas station into an ice cream parlor in Burlington, Vermont. Ben & Jerry became an ice cream empire.

Urban Renewal and Gentrification: Boston Market and B&B's

Faneuil Hall Market, Boston, which spawned the Boston Market restaurant chain, was one of the first urban redevelopment projects. It took a downtown area that had been warehouses and renovated it into small retail and food shops. Other cities followed this successful example. New Yorkers discovered old factories and warehouses with solid wood floors that could hold thousands of pounds and turned them into lofts. In more remote areas, old farmhouses and even lighthouses were turned into the newest getaway craze, the bed-and-breakfast—B&B. Unlike an impersonal hotel, the B&B provided chatty owners who lived on the premises, comforting fireplaces in the bedrooms (and sometimes the bathrooms), goose down quilts, liqueur nightcaps, and freshly baked breads and muffins for breakfast. The California coast abounds in B&Bs; one town that made a fortune turning California redwoods into lumber and then went into a decline revived by recycling its past and restoring its architecture. Eureka, California, has more buildings on the National Register of Historic Places than any other town in the United States. Eureka and the surrounding area north of San Francisco boast many B&Bs, hotels, restaurants, and private homes that began as Victorian mansions with the elaborate trim and detail known as "gingerbread." The picture of a B&B in Ferndale, California, is a real "gingerbread" house—the Gingerbread Mansion Inn.



The Gingerbread Mansion Inn. *Courtesy Bob Von Norman*

THE EIGHTIES: POLITICAL AND RESTAURANT REVOLUTIONS

Profound changes took place in world politics in the 1980s. When the U.S.S.R. invaded Afghanistan in 1979, the Americans sent CIA agents in to train the Afghanis to resist. This training was used in September 2001 against the U.S. In 1989, during the administration of Republican President Ronald Reagan, the communist government of the U.S.S.R. fell. So did the Berlin Wall—Germany was unified again. Free for the first time in the greater part of a century from the military-enforced dictatorship of communism, many areas fragmented along the religious and ethnic lines that had existed for hundreds of years. Czechoslovakia split into the Czech Republic and Slovakia. In the former Yugoslavia, war broke out between Serbs and Slavs again.

In the 1980s, American Baby Boomers, the generation that screamed its way through the 1960s with "Never trust anybody over thirty," hit thirty and panicked. Looking for immortality, they drank designer waters, joined health clubs, and exercised until their joints wore out. They sought "natural" herbal and vitamin solutions for their problems. St. John's Wort eased their depression, glucosamine and chondroitin soothed their joints, echinacea was supposed to cure their colds. They took ginkgo biloba to help them remember when to take everything else.

The Zagat Guide

In 1979, two New York City attorneys, both Yale Law School graduates (he went to Harvard, she went to Vassar), turned a hobby into a business. Their informal system of rating restaurants for friends evolved into best-selling guides for Tim and Nina Zagat and revolutionized the business of restaurant criticism. Unlike newspaper and magazine reviews, Zagat reviews don't depend on just one person. Over 100,000 people review restaurants in forty-five cities by filling out a detailed questionnaire.

The Iranian Revolution Comes to Beverly Hills Restaurants

There was another important shift in world politics in the 1970s. In 1971, England withdrew from the Middle East, leaving a power vacuum. In 1978, an Islamic fundamentalist revolution led by a religious leader, the Ayatollah Khomeini, overthrew the Shah of Iran (shah means "king") and took the American embassy in the capital, Teheran, and all of its employees hostage. The shah and the royal family had to flee, as well as thousands of Iranians who were used to doing business with Western countries, especially the United States. The women didn't wear long dresses and veils; they went to college, had jobs, and drove cars.

These Iranian/Persians brought their cuisine and their culture with them to the United States, especially to southern California. Iranian restaurants, groceries, and bakeries sprang up in Beverly Hills and West Los Angeles, including one restaurant with a *tannur*, the free-standing clay oven like an Indian tandoor. Signs in the Farsi language lined Westwood Boulevard just south of the University of California. Menus offered items like hummus; *polos* (rice-based meat dishes); and *fesenjan* (meat stew in a smooth pomegranate and walnut sauce). Fine pastry shops that sold baklava side-by-side with eclairs and petits fours showed the French influence on Middle Eastern food.

Iran stopped selling oil to the United States. Prices rose. Americans experienced something they had not experienced since World War II—shortages. They got up before dawn to drive to gas stations and wait in long lines for a limited number of gallons of expensive gas. The situation in the Middle East was stabilized briefly after the Gulf War in 1990,

when the United States stepped in at the request of Kuwait to protect it and its oil fields (originally developed and owned by America's Gulf Oil and British Petroleum, then nationalized by Kuwait) from invasion by Iraqis under their leader, Saddam Hussein.

One long-term result of the oil crisis of the 1970s was that Japan, always short of energy, made a conscious decision to focus on electronics, including energy efficient ones. Now, this technology runs many appliances. Electronic sensors stop cooking food when it's done; switch lights off when people leave a room; sense what's in the dishwasher.

The New Immigration and Ethnic Restaurants

In the 1980s, changes in immigration laws passed in the U.S. in 1965 began to show in an explosion of new immigrants—about one million a year in the last two decades of the twentieth century. The immigration wave that had occurred in New York and other eastern cities at the end of the nineteenth century occurred on the west coast at the end of the twentieth, with one crucial difference. The eastern cities got immigrants from southern and eastern Europe; immigrants to the west were from Asia, the Middle East, Africa, and Central and South America. Just as New York had Little Italy, German Yorkville, and the Jewish Lower East Side, southern California has Little Saigon, Little India, Little Ethiopia, Koreatown, and a sprawling new Chinatown in Monterey Park. (There was already a Little Tokyo downtown and a thriving Japanese community on the west side.) The census of 2000 showed that for the first time, whites were not a majority in California. The Hispanic migration was so massive—almost fifty percent of the population of New Mexico, for example—that many of the immigrants do not assimilate, but live in parallel cultures. This immigration caused an explosion of ethnic restaurants. On the same street with Jamba Juice and Jack in the Box are Islamic *halal* butchers, Mexican *panaderias* (bakeries), sushi bars, Brazilian sports bars for watching soccer, Hong Kong–style seafood restaurants, Franco-Caribbean restaurants, bagel stores, Argentine empanadas, Thai take-out, and Iranian restaurants. Now, "southwestern" can mean Tex-Mex or a region of India. And antipasto, antojitos, and amuse-bouches were joined by Spanish tapas, Middle Eastern *mezze*, Indian *chaat,* and the Japanese bento box.

McDonald's in China—Burger or *Bao?*

At the end of the twentieth century, industrialization arrived in Asia and brought about the same changes in cuisine and culture that it had caused in England in the eighteenth century and in the United States in the nineteenth: people moved from the country to the cities for more op-

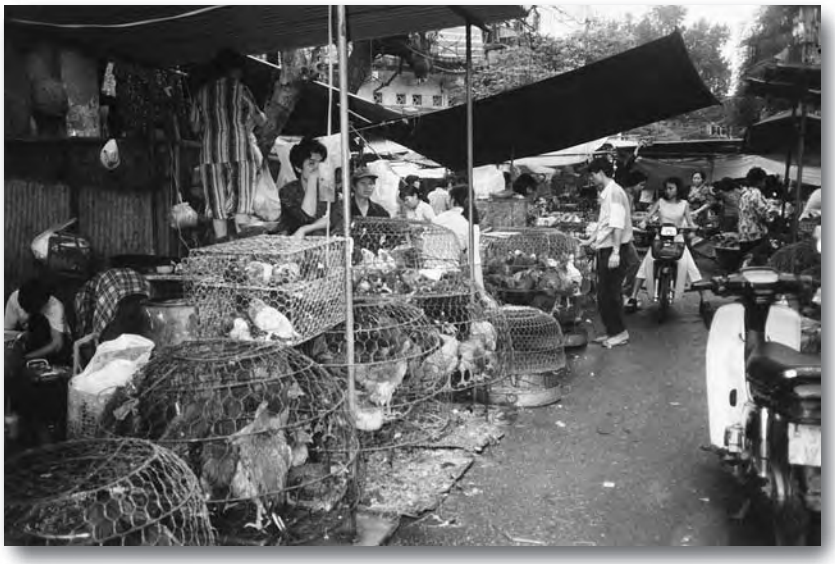
portunities; cities became crowded and polluted; class differences increased based on who owned businesses and who did the labor; traditional gender roles shifted. People who had lived on the land were no longer near the source of food or near their families, so rituals were disrupted. You don't have a *selametan* with strangers.

McDonald's, the most global of restaurants, opened in Asia. It made accommodations to local cuisines and cultures and also influenced them: vegetable McNuggets and "a mutton-based Maharajah Mac" in India; *halal* food in Muslim areas.[11] McDonald's opened in Beijing, China, in 1992. At 700-seats, it was McDonald's largest restaurant to that time.[12] Now, "seven of the world's ten busiest McDonald's restaurants are located in Hong Kong."[13] McDonald's was a model of American efficiency and created newer, higher standards of hygiene in food and restaurants. It started by moving the toilet out of the kitchen, where it had traditionally been to cut plumbing costs.[14]

But a hamburger on a bun and French fries—a full meal to Americans—doesn't fit the Chinese definition of a full meal, which has rice and vegetables. So in Beijing, McDonald's is a snack.[15] In Hong Kong, it doesn't fit the definition of meat, either. It's *bao*—a dumpling stuffed with meat.[16] In Hong Kong, Coca-Cola, exotic and imported, like sugar in medieval Europe, was treated as a medicine—served hot, with ginger and herbs.[17] Although the service is fast by American standards, for Chinese, fast food is something bought from a street vendor. Going into a restaurant with tables means sitting—and lingering.[18] Chinese stay twice as long in McDonald's as Americans, twenty to twenty-five minutes compared to eleven.[19]

In China, the most populous country on earth, it has been government policy since 1980 not to have more than one child. So the second generation of only children has no brothers or sisters, and because their parents are only children, too, they also have no aunts, uncles, or cousins. Enter Ronald McDonald, who is "Uncle McDonald," and his female counterpart, "Aunt McDonald." They are the extended family that is gone in China. They do what a good aunt and uncle do: take an interest in the children, talk to them and play games. Sometimes they do this while celebrating a child's birthday, an American custom previously unknown in China, but which has caught on as single-child families and prosperity combine to create child consumers. Aunt and Uncle McDonald also visit the children at school and at home, something Americans would find very strange.[20]

Another American custom new to Asia is "friendliness." Americans are used to "service with a smile"; Asians see strangers smiling as fakery to butter them up and cheat them. Asian seriousness about the job, including food service, comes across to Americans as "a deliberate attempt to be rude or indifferent."[21]



A poultry market in Vietnam.

Southeast Asian Cuisines

Since much of what Americans knew about Southeast Asian cuisines was connected to the Vietnam War, they didn't like them. Soldiers complained about fermented fish sauce, *nuoc mam* in Vietnam; *nam pla* in Thailand. They knew nothing of delicate spring rolls with wrappers made of rice flour instead of wheat flour; or of seafood seasoned with lemon grass and ginger; or of chili and mint combinations. Cilantro was a familiar herb, but Thai basil (also called holy basil) was not. Also foreign were oils flavored with chili, garlic, or scallions. Substantial noodle soups, called *phô*, and peanut sauces—*sate*—fared no better. Now, many Americans have acquired the palate necessary to appreciate these sophisticated combinations of Asian fusion food. Thai hot and sour foods show the influence of Chinese Szechuan and Hunan cuisine. They are intensely flavored with citrus leaves, coriander root, chilis, and lemon grass like the shrimp soup *tom yung kung*. Noodles like crisp-fried *mee krob* also show the Chinese influence. Desserts perfumed with jasmine essence were probably introduced by Arabs. Nouvelle Vietnamese restaurants like Michelia in Los Angeles, under the direction of chef-owner Kimmy Tang, serve Vietnamese food influenced by France, China, Italy, Thailand, Mexico, and California.

Chef Tang has lightened the fats and removed extra carbs in the filling by replacing rice noodles with jicama, a white Mexican-California vegetable that looks like rice noodles when julienned. She honors the Thai-Chinese influence with the ginger-green onion combination, while

INGREDIENTS:

Chef Kimmy Tang's Saigon Roll

TRADITIONAL SPRING ROLL *(Goi Cuon)*	NOUVELLE - CHEF KIMMY TANG'S SAIGON ROLL
8 cooked shrimp	8 peeled shrimp
8 cooked slices bacon	1 teaspoon canola oil
½ lb cooked rice noodles	—
8 mint leaves	8 mint leaves
8 basil leaves	—
8 lettuce leaves	¼ lb. mixed baby greens
1 handful bean sprouts	—
1 small cucumber, julienned	1 small cucumber, finely julienned
—	½ lb. jicama, finely julienned
—	⅛ lb. pickled carrot, finely julienned
—	1 stalk green onion, thinly sliced
—	4 thin slices of ginger, finely diced
4 sheets of rice paper, for wrapping filling	4 sheets of rice paper, for wrapping filling

the mixed baby greens provide a touch of France. Pickled carrots instead of bean sprouts introduce another level of color and taste that were absent in the traditional recipe. Both versions are served with a pungent sweet-sour fish and chili sauce.

Hong Kong was a special case in world history. When England's ninety-nine-year-lease on the tiny island expired in 1997 and ownership reverted to communist China, thousands of people left. Many were middle-class professional people used to a capitalist society who did not want to be under the rule of communist China. They took their Cantonese-influenced cuisine when they went to Thailand, Vietnam, and the United States. Called Chiu Chow (pronounced chow zhoo), it is seafood-intensive, based on cooking in seasoned broth.

In America, these immigrant groups followed the same pattern as earlier groups. At first, cooking was done at home, then in restaurants that catered to the immigrants, then in cross-over restaurants for the general public. The first Thai cookbook, *The Original Thai Cookbook* by Jennifer Brennan, wasn't published in the United States until 1981. By the end of the 1990s and the beginning of the twenty-first century, mainstream American publishing was producing many cookbooks devoted to the foods of



This menu offers items from all parts of the pig. *Photo courtesy John Bandman, Certified Chef de Cuisine and Educator, New York Restaurant School at Art Institute New York City*

Southeast Asia. They are the new style of cookbook writing, which includes not just cuisine, but culture, history, and memoir. More and more, in the global world and the global economy, people want to know not just what they are eating, but why. Like the cuisine, the authors of many of these books are multicultural and have lived on more than one continent. Some recent Vietnamese cookbooks: *The Vietnamese Cookbook*; *Pleasures of the Vietnamese Table*, *The Food of Vietnam*, *Foods of Vietnam*, *Lemongrass and Lime*; *Hot, Sour, Salty, Sweet.* Thai cookbooks include *Cracking the Coconut: Classic Thai Home Cooking*; *The Food of Thailand*; *Thailand: The Beautiful Cookbook*; *True Thai*, *Simply Thai*, *Easy Thai*, *Thai Cooking Made Easy*. *The Best of Vietnamese & Thai Cooking* covers both.

There were changes in more than just the food in restaurants. Hispanics went into kitchens in record numbers. By 2002, they were twenty-five percent of all commercial cooks, including in high-profile restaurants.[22] Women, too, caused changes in the front and back of the house. When Los Angeles attorney Gloria Allred took a male client to dinner at an elegant restaurant, her menu had food items but no prices on it. The male client's had food *and* prices. It was common practice at some upscale restaurants to give menus with prices only to male patrons because they were supposedly the ones who would be paying the bill, and women were not supposed to concern themselves with numbers and money. A

lawsuit later, all patrons at restaurants get the same menu. Although women had been able to get credit in their own names since 1973, it was still unusual for a woman—even a professional woman—to buy dinner for a man. In the twenty-first century, it is commonplace.

Northern Italian

In the 1980s, Americans discovered Italian food all over again. This time it was the (mostly) tomato-less northern Italian food from Tuscany, Emilia-Romagna, and Genoa. Pesto Genovese ("from Genoa")—basil, pine nuts, olive oil, and Parmesan cheese—became popular and soon had innumerable imitators. Parsley, sage, and cilantro were mixed with pecans, almonds, walnuts, or pumpkin seeds. Pasta sauces were cream and Parmesan cheese: Alfredo, not tomato. Rice and corn, in risotto and polenta, replaced pasta as the starch. Tiramisù—literally, "pick me up"—became a popular dessert. It was assembled, not cooked, made from food that would be on hand in an average Italian household: coffee, lady fingers or leftover sponge cake, mascarpone cheese, cocoa. In 1975, nouvelle spread to Italian when pasta primavera ("springtime")—pasta with vegetables—was invented at New York's Le Cirque restaurant. Spaghetti and meatballs in tomato sauce were *finito* in upper-class restaurants.

Fetal Alcohol Syndrome

In 1989, Michael Dorris, a Native American professor of anthropology at Dartmouth College in Hanover, New Hampshire, published a book called *The Broken Cord*. It was the agonizing story of his discovery of the disease from which his adopted Native American son was suffering, fetal alcohol syndrome or FAS. Drinking during pregnancy could cause severe central nervous system damage, seizures, and shorten life. He exposed the history of United States–Native American relations that had led to such despair that on the reservations young men carry can openers in their pockets to puncture spray cans of Lysol, smear the gel on bread, eat it to get high—and suffer severe nervous system damage. Soon after *The Broken Cord* was published, Congress passed a law stating that labels warning women of the dangers of consuming alcohol during pregnancy had to be placed on all bottles of alcoholic beverages.

THE NINETIES: THE RISE OF THE CELEBRITY CHEF

In 1991, the communist government of the U.S.S.R. came to an end and the Cold War was over. But a war for control of the television food audience was heating up.

The Food Network and Food Empires: Puck, Stewart, Lagasse

Some of the shows that have been on the Food Network: Rachel Ray's *30 Minute Meals*, *Everyday Italian* with Giada De Laurentiis, Anthony Bourdain's *No Reservation*, Sarah Moulton's *Cooking Live*, Gale Gand's *Sweet Dreams*, and the *Two Hot Tamales*, Susan Feniger and Mary Sue Milliken. Bobby Flay traveled across America, unearthing clambakes in Massachusetts and the stew called burgoo in Kentucky. Mario Battali and his sidekick Rooney ate their way across Italy from antipasto to gelato. A knock on the door could be Gordon Elliott bringing along a chef to surprise Mr. and Mrs. Average American and family with an amazing dinner cooked from odds and ends they found in the refrigerator, freezer, and kitchen cabinets. Alton Brown explained food chemistry with the aid of pop-up experts and graphics. Food 911's Tyler Florence could cure a sick bouillabaisse or whatever else ailed your food.

One of the most popular shows on the Food Network was *Iron Chef*. Dubbed from Japanese, this one-hour show pitted chefs cooking in Japan—male chefs—against each other. Each show centered around a theme food that was literally unveiled for the contestants for the first time: giant clam, eggplant, pumpkin. It is cooking as spectacle, cooking as contest, cooking as gladiatorial combat. It is the "straight" version of a comedy routine that John Belushi invented on the television show *Saturday Night Live* called "Samurai Chef," in which he hacked sandwiches to ribbons with a samurai sword.

In the 1970s, a shy young Austrian named Wolfgang Puck was the chef at Ma Maison, a trendy Hollywood restaurant with an unlisted telephone number. In 1982, he broke out on his own and opened Spago on Sunset Boulevard in West Hollywood, California. Puck re-invented pizza—he used the dough as a base for fusion food from worldwide cuisines: Black Forest ham and goat cheese; smoked salmon and golden caviar; duck sausage, chili oil, and mozzarella; and chicken, jalapeño peppers, and fontina cheese. His pasta could be spicy, spinach, or black with squid ink, sporting sauces or fillings of pumpkin, foie gras and truffles, smoked scallops, or sweetbreads. Bland white hothouse mushrooms were replaced with shiitake, oyster, chanterelle, enoki, cremini, and porcini. Puck's food became wildly popular, especially with celebrities, who gathered at the restaurant informally at first for what became Puck's famous—and very exclusive—Academy Award parties. He owns multiple restaurants, frozen Puck Pizzas and soups are sold now in supermarkets, and he also provides food for Century City Hospital west of Beverly Hills. In January, 2001, Puck began his own television show on the Food Network.

Martha Stewart went from model to Barnard graduate to Wall Street stock broker to Connecticut caterer to Martha Stewart OmniMedia to prison for insider trading, and back again. The Polish-American seemed

to discover what alchemists in the Middle Ages couldn't: how to turned everything she touched into gold. She transformed "housekeeping" into "homekeeping" and her line of paints, linens, and housewares brought affordable beauty and sophistication to mainstream K-Mart.

Emeril Lagasse, a Portuguese-American from Massachusetts and 1978 graduate of Johnson & Wales in Providence, Rhode Island, developed a tremendous following. Audiences respond to his outgoing everyman personality and signature phrases, "Kick it up a notch" and "BAM!" as he zaps his food with spices. He owns several restaurants and has a one-hour daily television show, a line of sauces, cookware, and cookbooks. Lagasse became so popular that the Food Network sometimes seems like "all Emeril, all the time."

Comfort Food

As the Baby Boomers aged, they lapsed from their low-fat diets and went back to the comfort foods of their 1950s childhoods, like meatloaf with gravy and mashed potatoes, pot pies, short ribs, macaroni and cheese, and Rice Krispies Treats. They also comforted themselves with $6 billion worth of cookies a year[23] and food they had eaten sitting around fires at summer camp, like S'mores—Graham cracker, chocolate bar, and toasted marshmallow sandwiches; and Banana Boats—scooped-out bananas stuffed with chocolate and marshmallows and heated slowly at the edge of the campfire. Soon, S'mores went upscale, served with a knife and fork in restaurants with tablecloths, napped in pools of raspberry coulis.

Golden Rice: GM versus Organic

Technology changed food preservation and food. Americans introduced irradiated food to extend the shelf life of food that would otherwise perish. "Nuked" food like soups appeared in pop-top or pour-spout boxes even in health food stores. Around the world, there was an increase in genetically modified food—GM. The purpose, as it had been since prehistory, was to produce greater yields of foods that resisted disease. France resisted the foods. Other European countries were not keen on GM either, either; they especially didn't want it applied to wines. In France and Italy, where wine is a traditional and sometimes family business going back generations and hundreds of years, wine and wine-making methods are sacred. But Italians have accepted GM wheat used for pasta.

GM Golden Rice, which scientists called "Miracle Rice," not only has an improved yield, but also packs a nutritional boost of vitamin A from beta-carotene, which gives corn and carrots their color. Lack of vitamin A causes about one million children a year to die, while as many as 230

CHRONOLOGY—GENETIC MUTATIONS / ENGINEERING[24]		
1500s	Europe	Cauliflower produced
1750	Belgium	Brussels sprouts appear, genetic mutation
early 1800s	Brazil	Seedless navel orange appears, genetic mutation
1840	Germany	Von Liebig writes *Organic Chemistry and Its Applications in Agriculture and Physiology*, explains soil fertility, changes farming
1859	England	Darwin writes *On the Origin of Species*, theory of evolution
1860	Germany	Crops grown hydroponically—in water only, no soil
1866	Czechoslovakia	Mendel discovers laws of "heredity factors" (later called genes)
1873	California	2 seedless navel orange trees begin California citrus industry
1873	U.S.	Burbank "builds" what becomes the Idaho potato, sells it for $150
1873	Japan	Dwarf wheat with large head that doesn't fall down produced
1907	Florida	Pink grapefruit appears on one tree, genetic mutation
1930	U.S.	Plant Protection Act allows new breeds to be patented
1945	Thailand	Jasmine rice invented
1950s	Iowa	Triticale invented, GM cross between wheat and rye
1953	England	Watson and Crick discover structure of DNA—double helix
1954	U.S.	**GREEN REVOLUTION BEGINS**: American scientists cross Japanese dwarf wheat with Mexican wheat, increase yield phenomenally
late 1950s	France	Tissue culture cloning developed
1965	U.S.	Orville Redenbacher introduces huge new popcorn
1966	Asia	IR8 rice, GM: "the most widely planted variety of rice, or of any other food crop, the world has ever known."[25]
1968	New York	Rio Red Grapefruit created using thermal neutron radiation
1974	Canada	GM rapeseed becomes canola, for "Canadian oil"
1978	U.S.	GM bacteria that clean oil spills are first patented living organisms
1982	U.S.	GM human insulin available, better than previous insulin (pig)
since 1985	Worldwide	More than 1,000 crops created by chemical or radiation mutation
1990s	Italy	$\frac{1}{3}$ of durum wheat grown for pasta is GM Creso, created with neutrons and X-rays
1998	U.S.	Almost 50% of soybeans and 25% of corn modified to protect against insects or herbicides
1999		Golden Rice patented (beta-carotene added to prevent blindness)
1999		Chymosin, enzyme made by gene splicing, replaces rennet in 80–90% of cheese in the U.S. and Canada
2001	World	Human genome sequence (all DNA) completed
2002	Europe	Bright purple Graffiti cauliflower, GM, available in U.S.

million more are in danger of going blind. The problem is especially acute in countries where rice is all they have to eat, because rice has no vitamin A. With millions in funding provided by the Rockefeller Foundation, a non-profit organization, scientists in Europe, the U.S., and Asia spent more than a decade developing Golden Rice. The seed was given away free to farmers in Asia, so the only profit would be to the people who needed the rice.

A hot topic is who holds the patent on these invented foods. As the laws stand now, farmers anywhere who have developed their own seeds—for example, an heirloom tomato—are not protected by the law unless they patent the seed. This makes farmers in developing countries vulnerable to multinational companies sending out biopirates, taking the seed, and patenting it themselves.

There are arguments against GM food and also against organic food. "Spot checks show the majority of organic produce is contaminated."[26] It can contain pesticide residues, or natural contaminants like bacteria: tuberculosis, salmonella, listeria, campylobacter, and clostridium, which causes botulism; they do not yield as much as modified foods, which is an issue in the face of world hunger; some organic farmers apply "natural" insecticides like *B.t.* toxin to crops while they are growing, but it is the same insecticide that has been engineered into GM seeds.[27] As Canadian scientist Alan McHughen puts it, you can name your poison: "Conventional foods have more pesticide residue contamination; organic foods have more biological contamination."[28]

Contamination in animal food increased, too. Zoonoses—diseases that leap from animals to humans—reached frightening proportions in England when bovine spongiform encephalitis, also called BSE or "mad cow" disease, crossed over to humans and caused Jakob-Creutzfeld, a fatal brain disease. The cause was traced to feeding the cows ground-up parts of other animals like sheep. There was widespread panic in Europe briefly, and consumption of vegetables and fish rose.

On July 25, 1996, the Food Safety and Inspection Service division of the U.S. Department of Agriculture published its final rule on the HACCP system. HACCP stands for Hazard Analysis and Critical Control Point. This system identifies seven crucial points in food production that could cause contamination and result in food-borne illness.

Sugar Blues: The Twinkie Defense and Diabesity

In the 1970s, sugar became a villain. It had gone from being a medicine and a cure-all in the Middle Ages, to an upper-class condiment, to a popular sweetener, and finally, to a drug. Sugar intoxication and a sugar "high" were followed by a crash in blood sugar levels that supposedly produced "sugar blues." It even became an excuse for crimes. In San Francisco in 1978, former policeman and city supervisor Dan White shot and

killed Mayor George Moscone and openly gay supervisor Harvey Milk in San Francisco City Hall. He claimed that it was not premeditated even though he brought extra bullets and avoided metal detectors by climbing in a window. His defense: "diminished mental capacity," a chemical imbalance in his brain from eating too much sugar-rich junk food just before the murders. This became known as "The Twinkie Defense." The jury found White guilty of only the lesser charge of manslaughter. In 1985, shortly after he was paroled from prison, White shot and killed himself, but there is no record of what he ate beforehand. In 1982, California voters eliminated this diminished capacity defense.[29]

While sugar as a cause of criminal behavior remains open to debate, sugar as a cause of physical illness is well established. Diabetes is a disease in which the pancreas cannot process sugar properly, which can lead to organ damage. Ninety to ninety-five percent of those with diabetes have what is called Type 2. This usually strikes after the age of forty, which is why it is also called "adult onset diabetes." However, from 1990 to 1998, diabetes increased by one-third in the United States. The vast majority of this increase—seventy-six percent—was among people aged thirty to thirty-nine. It is much more prevalent in the Southeastern and Midwestern states and in California. It also has preferences: Native Americans, Alaska Natives, and African-Americans have a much higher incidence of the disease. The two major causes are an increase in obesity and a decrease in exercise. Sixty percent of Americans do not exercise regularly, and twenty-five percent do not exercise at all.[30] A new word entered the English language: *diabesity*.

Some obese people view these medical facts as a personal attack. They have organized and claim it is possible to be fat *and* fit, all evidence to the contrary. One class of deliberately obese professional athletes provides an example. Sumo athletes eat foods that are healthy—vegetables, meat, and fish—but portions that are not, so they can gain weight (and a secret sumo drink to bulk up). They suffer from all the illnesses caused by obesity: diabetes, high blood pressure, heart and joint problems. Their life expectancy is ten years less than an average Japanese male. The professional sumo association decided to set weight limits because the sport was going out of sumo—extremely heavy men (500-plus pounds) couldn't execute complicated moves and it was becoming simply a matter of one big-bellied man trying to push another big-bellied man out of the ring.

Fat Blockers and the French Paradox

Americans say they want to lose weight—they just don't want to have to change what they eat or feel deprived while they do it. They want to have their cake and eat it, too. One of the first attempts at fat blocking

was an herbal combination unregulated by the FDA. Fen-Phen was removed from the market when its users began experiencing serious side effects, even death. Then came Olestra, which blocked fat absorption in the intestines but had side effects, too, such as diarrhea. There were other fat blockers, low-fat or no-fat desserts that compensated for the lack of fat with an increase in sugar; baked instead of fried potato chips, for which Lay's mounted one of the most expensive campaigns in advertising history using supermodels and Miss Piggy the Muppet.

Culinary Puzzle

THE FRENCH PARADOX

The French Paradox is how the French eat foods high in fat but have less heart disease than in America. Many theories have been advanced as to why. Smaller portions? Greater wine consumption? Cigarette smoking? Or maybe it's their joie de vivre—joy of living. The entire country stops work in August and goes on vacation. There are also close ties with family. The French workday ends so everyone can go home for dinner, unlike the American 24/7 work day. Whatever the reason, nutritionists predict this will change if the French diet shifts to more fast food.

In 1996, a new physical condition was identified: people who were normal weight and looked thin but had too much body fat. Dr. David Heber at UCLA coined the term *sarcopenic obesity* to describe people who have fat where they should have muscle. Sarcopenia (loss of muscle) usually occurs in elderly people whose muscles wither from lack of use, but sarcopenic obesity occurs, for example, in young women who are terrified of gaining weight, so they don't eat enough protein or get enough exercise. According to the height-weight charts, they are the right weight, and they look all right in their clothes, but they are not fit and healthy.[31]

On December 31, 1999, much of the world went into a panic over the coming year 2000 (Y2K). Like people in the Middle Ages 1,000 years earlier, some expected the world to end at the beginning of the new millennium; others stockpiled food, water, and ammunition because they feared a worldwide breakdown of the computer systems that control telephones, traffic lights, electricity, and national security systems. None of this came to pass.

THE NEW MILLENNIUM AND THE FUTURE OF FOOD

> "Among the Millennium Development Goals which the United Nations has set for the 21st century, halving the proportion of hungry people in the world is top of the list."
>
> —UNITED NATIONS WORLD FOOD PROGRAM

> "What we eat has changed more in the last forty years than in the previous forty thousand."
>
> —ERIC SCHLOSSER[32]

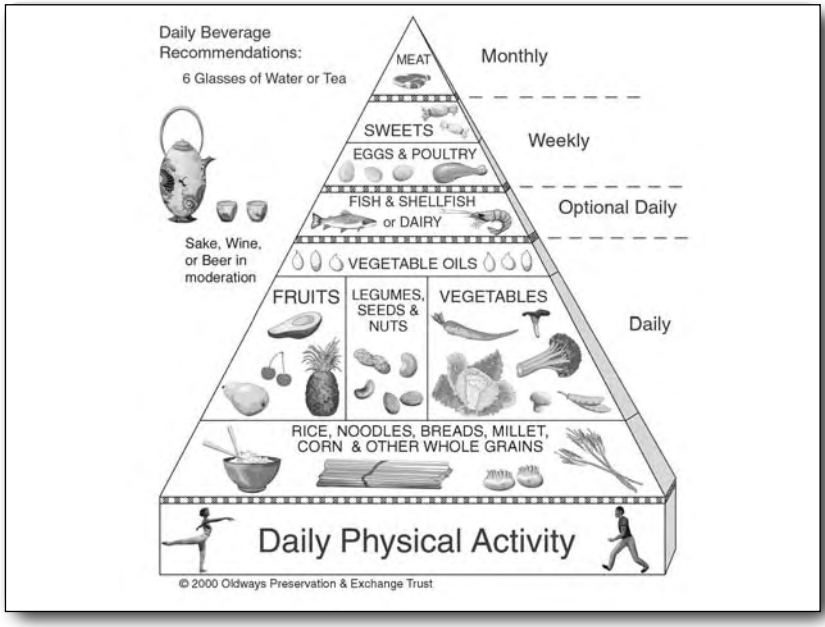
Drastic changes had occurred in American life by the year 2000. Just as by 1920 a majority of Americans lived in cities, by 2000 a majority of Americans lived in suburbs. In the beginning of the nineteenth century, the vast majority of Americans were farmers. In the beginning of the twentieth century, most Americans worked in factories. In the beginning of the twenty-first century, the fastest growing sector of the economy was service jobs, especially restaurants, which employed 3.5 million people, many at minimum wage. About fifty cents of every dollar Americans spent on food was spent in a restaurant, predominantly fast food, often drive-through—more than $110 billion.[33] The top five fruits and vegetables that Americans do buy are bland, lack variety, and are not the most nutritious. Two are fresh—bananas and iceberg lettuce, a pale, not dark green leafy vegetable. The other three are tomatoes, potatoes, and oranges, mostly processed as sauce, French fries, and juice, respectively.[34]

At the same time, part of the population was very concerned about where their food was coming from. On December 20, 2000, the United States Department of Agriculture (USDA) set national standards for "organic" foods and ordered that labels be applied to foods in 2002, after farms have been inspected. To rate a label of "100 percent organic," foods must meet the following criteria: (1) no irradiated food; (2) no genetically altered food; (3) no synthetic insecticides; (4) no chemical fertilizers; (5) no chemical herbicides; (6) no sewage sludge; (7) no growth hormones.[35] In May 2006, the first International Federation of Organic Agriculture Movements (IFOAM) conference on Organic Wild Production was held, in Bosnia and Herzegovina.

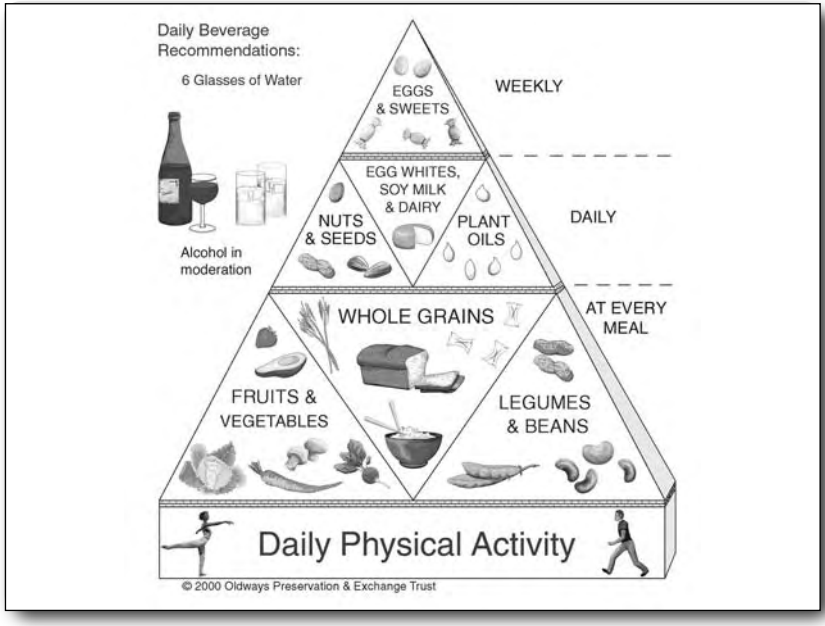
The USDA minimum daily nutritional requirements also changed from the four basic food groups to a food pyramid that still relied more heavily on meat than the food pyramids of other countries. It was also different in what it lacked: other pyramids included exercise and water. In 2005, the FDA revised nutritional requirements again.

A Few Words about Windows on the World

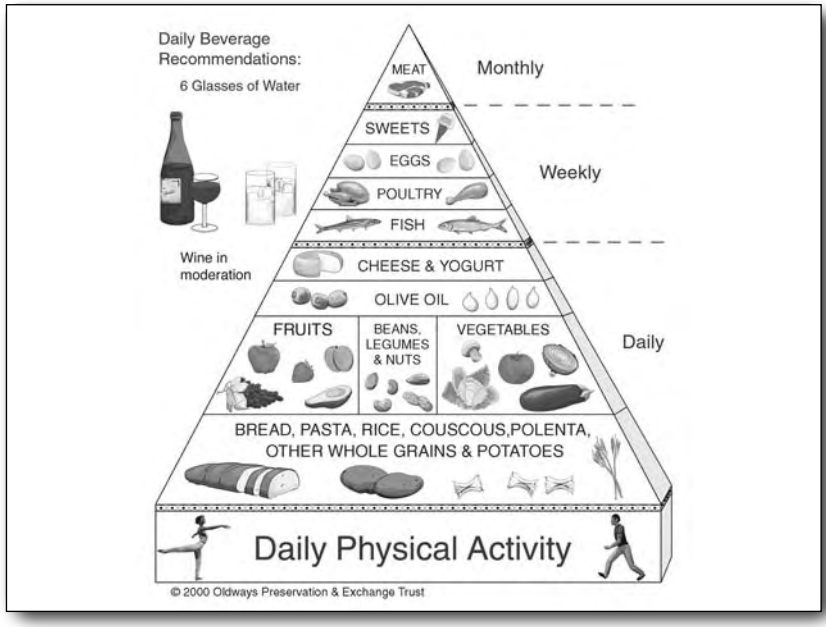
Tuesday morning, September 11, 2001. At the southern tip of Manhattan stand the Twin Towers of the World Trade Center, the tallest build-



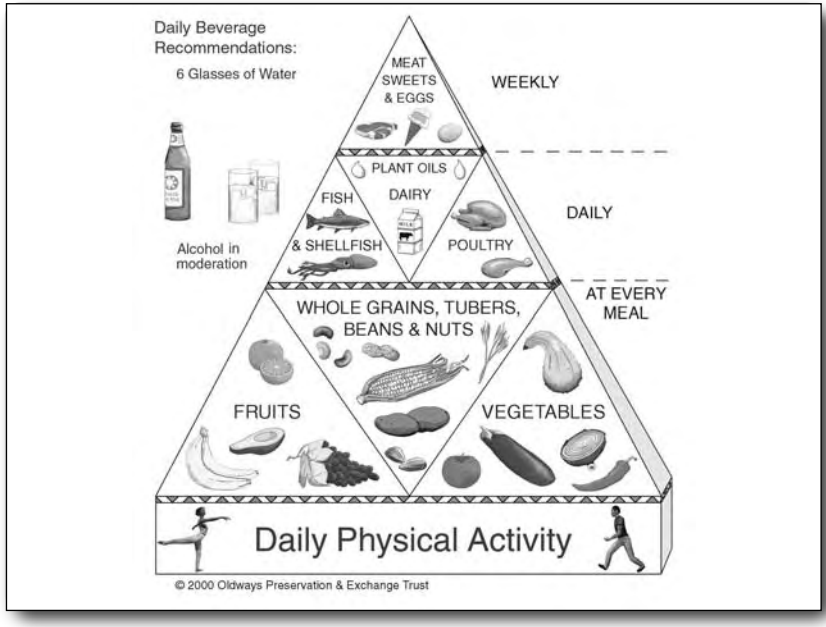
The Asian Diet Pyramid. *©Oldways Preservation & Exchange Trust*



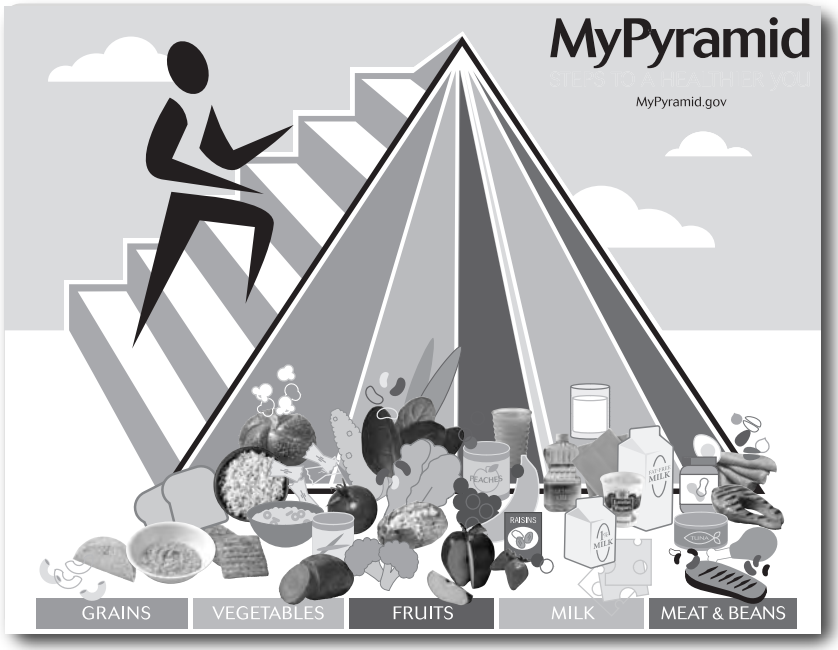
The Vegetarian Diet Pyramid. *©Oldways Preservation & Exchange Trust*



The Mediterreanean Diet Pyramid. *©Oldways Preservation & Exchange Trust*



The Latin American Diet Pyramid. *©Oldways Preservation & Exchange Trust*



The U.S. Food Pyramid. *Courtesy the United States Department of Agriculture, Food and Drug Adminstration*

ings in New York since they were built in 1976. Every day, 50,000 people file into the buildings, which have their own zip code, to work and to visit. They come from New York, New Jersey, Connecticut, Pennsylvania, and more than sixty countries. And all of them have to eat.

Throughout the building, private chefs are preparing meals. On the 106th and 107th floors—the very top—of One World Trade Center, seventy-nine staff members are in the kitchens of the Windows on the World restaurants. Some are bringing breakfast to the 500 people attending a business seminar. Executive Chef Michael Lomonaco, the gifted man who turned around "21" and raised the Windows restaurants to award-winning excellence, will take the fifty-eight-second elevator ride up 107 stories in a few minutes, after he gets his new eyeglasses. But Michael Lomonaco will never get into the elevator, because the building will be on fire, filled with exploding fuel from two jets hijacked by Islamic terrorists. Another jet crashed into the Pentagon; a fourth, headed for Washington, D.C., went down in a field in Pennsylvania. Thousands of people died, including the kitchen staffs and hundreds of police and firefighters. In January 2006, food workers from the Twin Towers opened a cooperative restaurant called Colors.

The Zagat Guide said that Windows on the World "put diners close to heaven." The view from the top of the world on the 107th floor was indeed spectacular. As you looked down into the harbor, the Statue of

Liberty, a gift from France in 1886, raised her torch up toward you. The famous words "Give me your tired, your poor, your huddled masses yearning to breathe free" by Jewish-American poet Emma Lazarus are written on the base of the statue. George Delgado, the mixologist at Windows on the World (now at barmanac.com), invented many drinks, some inspired by the vistas from Windows.

Windows on the World Drink of the Month– July 2001
GEORGE DELGADO'S LADY LIBERTINI MARTINI

3 oz. Grey Goose Vodka ¼ oz. Monin Kiwi Syrup

"In an ice-filled mixing glass, add the kiwi syrup and the Grey Goose Vodka (which I consider to be 'the other great gift from France'). Shake it thoroughly and give a quick check on the color. It should match the green, rusted copper color of the Statue of Liberty. If it's too pale, add up to ¼ oz. more of the kiwi syrup. But remember, the syrup is for color only; the end result should be a vodka martini. Now you can strain the cocktail into a chilled martini glass. For aesthetics you may try a red-colored garnish like a speared cherry or an orange twist to represent the 'torch of liberty.' I wish you could join us here at Windows on the World to make this celebratory tribute."

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The U.S. retaliated by invading Afghanistan in a search for Osama bin Laden, the mastermind of the attacks. It later invaded Iraq, toppling dictator Saddam Hussein.

The European Union

On January 1, 2002, eleven countries in the European Union began using the same currency, the Euro. The countries, in alphabetical order, are Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain. These countries (with the exception of Finland) had waged almost constant war against each other for 1,500 years, including nine world wars. They had been city-states, had monarchs, civil wars, revolutions, been split up, reunified with different boundaries, and finally, turned into democracies or limited monarchies. Now, for the first time since before the western Roman Empire fell in A.D. 476, peace reigned among these countries. And menus in every single one had to be rewritten to reflect the new currency.

Gluttony for Fun and Profit

On February 21, 2002, the Fox Network broadcast a program called "Glutton Bowl." Filmed in an airplane hangar at the Santa Monica, California, airport, the two-hour pseudo-sports event presented chow hounds as athletes, providing Olympic-style commentary about their strategy and training (tip: they chew Tootsie Rolls to build up their jaw muscles). Each five-minute contest began with a fifty-five-gallon drum suspended from the rafters dumping an avalanche of food onto the hangar floor: hard-boiled eggs, quarter-pound sticks of unsalted butter, whole beef tongues, mayonnaise, hot dogs with buns. As a historical measure of the connection between cuisine and cultural decadence, this is right up there with vomitoriums in the Roman Empire and fountains gushing wine in the Renaissance.

Everything Old Is New Again

Humans continually reinvent and repeat their cuisines and cultures, with new twists. Now, meats like buffalo and ostrich, formerly consumed by Stone Age tribal people, are sold in American supermarkets. Pomegranate juice, used 5,000 years ago in the Middle East, is marketed in the United States as a powerful antioxidant health drink. Roman excesses returned in the widespread use of truffles, chocolate, caviar, fine wines, and other foods that had entered the culinary world as affordable only by royalty. *Verjus*, the juice of unripe grapes and out of vogue since the Middle Ages, is produced commercially in Napa, California, as the wine-friendly alternative to vinegar in salad dressing. In another throwback to the Middle Ages, edible gold reappeared, but this time as a powder to adorn the rims of martini glasses. Diets became high carb, then low carb, and niche marketing reached wines when they went light with Beringer's reduced-calorie White Lie. *Moros y cristianos*, the black beans and rice from Spain in the Middle Ages, is still a staple in Cuban restaurants, but it is called just *moros,* and in an age of increased health consciousness, sometimes the rice is brown. The Aztec food that the Spaniards couldn't bring themselves to eat in the sixteenth century—spirulina—is now sold in health food stores. The sweet-and-sour sauce combination of the Middle Ages became palatable again as the *gastrique,* a sugar/honey and citrus sauce, even for fish. *Coca-Cola* is the second most recognized word in the world, after *O.K.*[36]

In the summer of 2000, locust plagues infested the American West as they had more than 100 years earlier.[37] This time, they were fought with poisons and pesticides instead of hopper dozers. Almost 100 years after the ice cream cone was invented, chef Thomas Keller of the French Laundry in Napa Valley re-invented it as a savory cone or cornet and scooped salmon tartare into it. Chefs Mark Miller, Stephan Pyles, and

John Sedlar took tamales upscale with jerk shrimp, truffle butter, foie gras, roasted pheasant, duck confit, and venison chorizo. Chefs were celebrities again, as they were after the French Revolution. Soft drink giants like Coke and Pepsi extended their markets by inventing "health" drinks with herbal additives that, like the patent medicines of 100 years earlier, promised to cure whatever ailed the consumer. The FDA sent them warning letters.[38] Heirloom tomatoes with names like Black Zebra, Box Car Willie, and Big Rainbow (all genetically engineered in the past) returned to supermarkets again, while the food of new ethnic groups joined the food of older ethnic groups in becoming "typically American." Just as Italian and German foods like pizza, hamburgers, and hot dogs had become "typically American," a Mexican food, salsa, replaced ketchup as the leading condiment in the United States.[39] Americans continued their love affair with pizza, eating 100 acres of pizza per day—three billion pizzas per year.[40] In 2005, Domino's combined the top two American fast foods—pizza and burgers—and produced the Cheeseburger Pizza. Fine wining and dining on the railroad reappeared on the Napa Wine Train. Brunch, an American invention, caught on in France as *Le Brunch*.[41] In 2001, the chefs who began *nouvelle cuisine*—Paul Bocuse, Michel Guérard, Paul Haeberlin, Pierre Troisgros, and Roger Vergé—declared it *fini*.[42] In 2002, California chef Roxanne Klein brought food full circle, from the cooked back to the raw, at her restaurant with no stoves in the kitchen and no food heated higher than 118°F. It closed in 2004. "Cookies," Dutch in origin and first described in print by Amelia Simmons in 1796, now mean shortcuts on the internet. The internet also gave America's most popular canned luncheon meat a new meaning and turned it into a verb. Through everything, still surviving, but now meaning junk mail on the internet, there is Spam. And somewhere, deep underground in Georgia, a time capsule is waiting to be dug up in the year 8113, so people of the future can taste Coca-Cola—on the remote chance the company isn't still in business then. But it might have competition—in 2006, a native tribe in Colombia put coca juice in a beverage it markets as Coca-Sek.[43]

At the beginning of the new millennium, American fashion experienced a resurgence of interest in the 1950s, which it called "Midcentury," especially the houses, which were built with wood floors, tile kitchens and bathrooms, fireplaces, and lots of windows. Wealthy Baby Boomers took advantage of low interest rates to remodel their homes or buy new ones, ending up with 10,000 or more square feet. These enormous homes had huge showplace kitchens with tile, wood, faux finishes, and farmhouse sinks to make them look like they came out of French farmhouses or Tuscan villas, but these American kitchens were almost as large as the entire Mediterranean farmhouse. They also boasted commercial-grade, stainless steel appliances; separate wine refrigerators or cellars; over the stove, antique-finish, pot-filler faucets; bar sinks; walk-

in pantries; and granite kitchen islands. Some expanded the kitchen even more to include plasma TVs, fireplaces, and sofas in what became a new take on the old colonial great room. Elaborate kitchens and living rooms were also built outside. But many of these kitchens were built by people who didn't cook.[44]

These new mansions also had home theaters, so with satellite TV, pay-per-view, and movies that could be bought or rented on the internet and sent through the mail (Netflix), people went out to the movies less. To try to lure customers back, some movie theaters began offering, in addition to popcorn and candy, alcoholic beverages like martinis and beer that patrons could take into the theater. Movie studios promoted their movies and sold DVDs in one place Americans did continue to go—Starbucks.

Native Seeds, Sustainable Salmon, and the Ark

The future of food lies in preserving its past. While some plants are cultivated in increasing numbers, hundreds of species become extinct every year. Scientists call this an ecological disaster. Part of the tragedy is that we do not know what new foods or medicines might have been in these plants that are gone forever.

In 1983, Native Seeds/Search (www.nativeseeds.org), a non-profit organization based in Tucson, Arizona, was founded. It has reclaimed 2,000 varieties of arid plants cultivated by Native American peoples like the Apache, Yaqui, Paiute, Pima, Hopi, and Navaho. Fifty-five percent of the seeds are for the native three sisters—maize, beans, squash. The remaining forty-five percent are both Old and New World: black pinto, orange lima, and scarlet runner beans; purple string beans, pink lentils, yellow-fleshed watermelon; wild tomatoes and tomatillos for green salsa. Chile pepper connoisseurs appreciate the locally grown Jemez, Isleta, and Chimayo chiles. Organizations like the Nature Conservancy preserve seeds, too. In addition, governments throughout the world have established more than 100 germ plasm banks to store seeds and cells. In the United States, the NSSL—the National Seed Storage Laboratory—began at Colorado State University in 1958. Today, more than 232,000 types of seeds are stored there, with plans to save more than one million.[45]

Not only sustainable agriculture, but sustainable livestock and fish are important to the future of food. Seafood, halibut, sole, and all five kinds of salmon from Alaska—pink, chum, coho (also known as silver), sockeye, and king (chinook)—are wild because fish farming has been illegal in Alaska since 1990. Salmon are unique. Born in fresh water, they swim out into the ocean, sometimes thousands of miles, live there for years, then return—only once—to the *exact spot* where they were born to lay and fertilize their eggs, sometimes thousands of feet above sea level. (This is beyond the comprehension of mere humans, even scientists.) The salmon

are caught at spawning time, when they are heaviest and most loaded with nutrients. Wild Alaska salmon eat marine life like shrimp, herring, and squid, which makes them high in antioxidant vitamin E and omega-3 oils. They also change color then, to their distinctive pink. Farmed salmon, in pens, are dyed salmon color. The state of Alaska monitors how many fish are running, water quality, and other factors to ensure no overfishing. Within one hour of being caught (some by hand on a line), wild Alaska salmon are flash frozen in a −40°F blast freezer and glazed with a coat of water which freezes and forms an airtight seal to prevent oxidation. (See www.alaskaseafood.com or www.gourmetsalmon.com.)

RECIPE:

Joy Martin's Salmon Carpaccio

About 2 pounds of salmon, frozen (flash-frozen at sea is best because it removes any chance of parasites, or have the fishmarket do it)
2 Tablespoons salt
Freshly ground pepper
2 Tablespoons fresh thyme
2 Tablespoons fresh chopped tarragon
2 Tablespoons fennel seeds (wild are best), chopped or milled in a grinder
1 cup olive oil
Juice of 2 lemons
2 Tablespoons capers

Thaw the salmon. Remove the skin and pin bones. (Most fish markets will do this.) Put the salmon in a non-reactive container. Combine the dry ingredients and sprinkle the salmon on both sides. Add the liquids. Cover the salmon tightly and refrigerate for at least two days and up to five. Turn twice a day. Remove from refrigerator one hour before serving. Hold the fish up to drain all the liquid, strain it, and save. Cut very thin slices of salmon slightly on the diagonal and place them on a serving platter. Whisk the reserved liquid until thick and spoon it over the salmon. Scatter the capers on top.

In 1989, the Slow Food movement (slowfoodusa.org) was founded in Paris to counter the fast-food trend. Now based in Italy, it has more than 80,000 members in chapters called *convivia*, like ancient Roman banquets, in more than 100 countries.[46] Its symbol is the snail; its main project is The Ark. Like Noah's Ark, its goal is to save the living things of the earth and to promote biodiversity and high quality, sustainable food production. Recently, in conjunction with the American Livestock

Breeds Conservancy, it reintroduced to the marketplace four excellent-tasting heritage turkeys that have been crowded out by the big-breasted Large White variety.[47] Near extinction are the Naragansett (fewer than 100 alive), Jersey Buff and American Bronze (fewer than 500 breeding birds each), and Bourbon Red (664 breeding hens).

But in spite of the efforts of Slow Food and other environmentally conscious organizations, some species are dangerously close to extinction. In 2006, five species of fish in the deep waters off eastern Canada were listed as critically endangered—two types of grenadier, blue hake, spiny eel, and spinytail skate.[48] At the same time, the Convention on International Trade in Endangered Species called a halt—supposedly temporary—to all exports of caviar. As wild sturgeon and their eggs have become more rare because of pollution, poaching, and over-fishing, the price has gone up. The price of beluga, the top grade of caviar, more than doubled in one year, to over $200 per ounce, earning its nickname—"black gold."[49] Sturgeon farms are springing up in some countries, including the U.S., but the quality is not as good.

The Edible Schoolyard and the Wellness Policy Guide

On Sunday, August 26, 2001 (coincidentally, the eighty-first anniversary of the day the Constitution was amended to give women the right to vote), Chez Panisse turned thirty. The $500 per person celebration was a benefit for the Chez Panisse Foundation. This supports, among other things, the Edible Schoolyard, a project with Martin Luther King, Jr., Middle School in Berkeley, California (www.edibleschoolyard.org). Alice Waters wanted children to learn about food from gardening to cooking to serving so they will eat better. Sustainable, earth-friendly agriculture also teaches children respect for nature and for themselves. Waters believes that "the most neglected schoolroom is the lunchroom."[50] This is especially true since school budget cuts at the end of the twentieth century got rid of most of the home economics programs started by Ellen Richards and other professional women at the beginning of the twentieth century. It also made cash-needy schools eager for corporate sponsorship. Food giants like Taco Bell and Pizza Hut served students lunches; Coca-Cola machines sold them sodas. In 2002, the Los Angeles Unified School District began to reverse this trend when they voted to take the soda machines out of schools. The children protested. Raised on caffeine, sugar, carbonation, and fats, and used to the taste and mouth feel produced by artificial flavors and trans fats, they demanded their right to adulterated food and beverages. Harvey Washington Wiley spins in his grave.

In 2004, in an effort to reduce childhood obesity, the U.S. Congress passed the Child Nutrition and WIC Reauthorization Act. This law required every school to have a written Wellness Policy stating what kind

of physical education it was providing; what kind of nourishing, healthy food it was serving; and how it was educating students and their parents about the connection among diet, exercise, and health. The goal is to involve the entire educational community in helping children become and stay healthy and develop good eating habits that will stay with them all their lives. The Wellness Policies were scheduled to go into effect at the beginning of the school year in the fall of 2006. A Model Wellness Policy Guide was drawn up as a joint effort by the Center for Ecoliteracy, Slow Food USA, and the Chez Panisse Foundation. It is available on the internet at http://www.ecoliteracy.org/programs/wellness_policy.html. Congress was also considering making junk food illegal in schools.

There are a growing number of projects that promote the healing power of nature and of food: the Garden Project at the San Francisco County Jail, run by Catherine Sneed; the Veterans' Administration Hospital garden project in west Los Angeles; Les Dames d'Escoffier school projects throughout the United States; the Vassar Farm; chef Ann Cooper's school on Long Island; in the Midwest, chefs Charlie Trotter and Rick and Deann Bayless, to name just a few. Julia Child turned ninety on August 15, 2002, and funded children's educational programs with part of the proceeds from the sale of seeds for Julia Child Heirloom Tomatoes. There are many others, and they all have one goal: ensuring good, healthy food for this generation and for all those to come.

Tsunamis and Hurricanes

On Sunday, December 26, 2004, one of the greatest disasters in human history struck Asia as earthquakes under the Indian Ocean west of Australia triggered a series of tsunamis—waves, walls of water up to thirty feet high, traveling more than 300 miles an hour. The earthquakes ranged in magnitude from 7.5 to 9 on a scale of 10. The aftershocks by themselves were major earthquakes. The tsunamis traveled thousands of miles, sweeping east to Malaysia, north into Thailand and Myanmar, west across the Indian Ocean to Sri Lanka and southern India, and reached Somalia on the east coast of Africa. They wiped out entire villages and killed hundreds of thousands of people. One-third of the dead were children. An estimated five million people were left homeless and had their jobs destroyed. Indonesia was hit hardest, especially the city of Banda Aceh, where an estimated 80,000 people died in a few minutes. For more information, see the World Food Program website, http://www.wfp.org.

The most immediate problems were getting clean water and food. Sanitation was a serious concern as water supplies were contaminated. People who had spent their lives making a living fishing no longer had boats or nets. Or families or homes. When some people realized that no one else in their families had survived, they tried to commit suicide. The

world responded with massive amounts of aid, but distributing it was difficult with roads and communications destroyed or lacking in the first place. Sometimes local governments were wiped out, too. It will take years to rebuild, generations to forget.

The future of food is also unclear in America's party town, the home of Mardi Gras and the Museum of the Cocktail. New Orleans, one of America's premier food cities, was battered by multiple hurricanes in the fall and summer of 2005. One, Katrina, broke the levees and flooded the city, leaving hundreds of thousands homeless. Neighborhoods and restaurants were destroyed, cooks scattered or dead. By 2006, the Museum of the Cocktail was shaking and stirring in Las Vegas.

Food: Past, Present, and Future

As we proceed into the twenty-first millennium, world population continues to increase. Providing clean drinking water and producing enough food become problems. This was first pointed out by an economist named Malthus in 1798, who said that population increases exponentially—two people have two children, who each have two children, for a total of four. Each of them has two children, which equals eight, etc. But land cannot be increased; only the productivity of the crops can, with human manipulation, as humans have been doing since pre-history. At the same time, land is lost as the increasing population takes it for housing, industry, stores, and schools. Intensive food production methods create cheaper food, but they also make it easy for diseases to spread. Avian flu is one of these. The virus, H5N1, finds ideal conditions among the millions of chickens packed together on enormous ranches, as they are raised in China.

Americans will continue to spend billions stampeding from diet to diet, looking for the quick fix to take the weight off fast. They'll cut out carbs, cut out beef, eat for their blood type, eat according to the glycemic index. There is even a Stone Age diet. Delta Airlines offers fourteen different types of meals, all with no MSG: Asian; baby, toddler, and child; bland; diabetic; fruit plate; gluten-free; Hindu; kosher; low-calorie; low-cholesterol/low fat; low-sodium; Muslim; seafood (hot and cold); and vegetarian (ovo-lacto and pure).[51] Perhaps in the future, we can look forward to "Dieting for Your Zip Code" or "Eating for Your Social Security Number." Or even a diet based on science: maybe at birth, future generations will receive printouts of their genotype so they can avoid foods that will damage their cell structure and help them live longer, healthier lives. Or maybe they'll be genetically modified, before or after birth, to remove food or other sensitivities or health problems.[52]

And increasingly in the U.S., they'll be leading those lives alone. The 2000 census showed more single-person households—31.6 percent—than families—31.3 percent. Single people and families have very dif-

ferent eating habits. Single-serving foods and small watermelons like the Bambino (Italian for "baby") are just two of the ways food producers target the singles market.[53]

Humans will also continue to search for immortality in food. Witness the boon in fruit juices high in antioxidants, like pomegranate, blueberry, and raspberry; in green tea; in herbal remedies like extracts of ginger and cucurmin; and in bottled water—in some cases, just tap water with flavoring. Just like in the Middle Ages, the farther away it comes from and the more expensive it is, the better it must be for you, like mangosteen and goji berries.

New technology will continue to affect how food is processed and served, and to make food more convenient. Printers using vegetable ink and rice paper crank out edible menus and transfers for name-branding food items and for cake decorating. Licensing recognizable cartoon characters like Mickey Mouse, Barbie, Cinderella, Spider Man, and the Sesame Street muppets for cake pans, candles, and other items is a growing business. Silicone bakeware makes greasing and flouring pans a thing of the past. Computers connecting the front and back of the house have replaced the *aboyer* or barker. Video cameras monitor cash registers and food prep areas.

A revolution in food packaging has also occurred. Cryovac, aka *sous vide*—literally, "under vacuum"—is increasingly used to preserve and package food, replacing tin cans with tear-open packages, even of tuna. Vegetables that can be microwaved in the bag they are sold in cut out washing vegetables and pans. Microwaves pre-programmed with one-touch cooking for frozen food, pizza, and popcorn replace gas and electric ovens from the 1920s through the 1950s that printed temperatures and cooking times for foods on the inside of the oven door.

Genetic modification of food will continue, and will continue to be championed by some and reviled by others. Customers who ask how the neon purple Graffiti cauliflower became that color are told that it's a naturally occurring enzyme. It *is* naturally occurring, but not in cauliflower until it was genetically modified. The debate over organic and sustainable will continue, too, as health food advocates want chemicals that cause cancer in laboratory rats banned. But this isn't as straightforward as it seems: "Coffee . . . contains more than a thousand chemicals: 28 have been tested, and 19 turned out to be carcinogens in rats and mice. Plants produce many natural pesticides: 71 have been tested, and 37 are carcinogens in rats and mice."[54] Some scientists question the validity of comparing humans and laboratory animals at all. So, in spite of cracking the code of DNA, discovering vitamins and minerals in food, and conquering sanitation diseases, much remains to be discovered about food and its properties. New foods continue to show up, like the Laotian rat, discovered in 2005.

Regardless of where food is grown, how it is harvested, processed, packaged, or transported, it will still need to be cooked. Every man or woman standing at a stove in a modern kitchen has connections that reach back millennia, to Julia Child taking cooking classes at the Cordon Bleu; to the young chef Escoffier foraging for food during the Franco-Prussian War; to the scientists Snow and Pasteur and Koch experimenting to find the causes of sanitation diseases, sour wine, and anthrax; to the homeless ten-year-old Carême walking into a professional kitchen for the first time; to Appert and his Champagne bottles filled with the first bottled food; to the anonymous African-American women cooks sweating in the plantation kitchens of the American South and the anonymous men cooks freezing in the snow on Napoleon's retreat from Moscow; to American orphans and Chinese slaves; to Russian communal kitchens and American settlement houses; to nuns in convents making communion wafers and eunuchs cooking for harems; to Mongols drinking koumiss, Romans roasting pig at a banquet, Greeks drinking wine at a symposium, and high priests in Egypt and Mesopotamia offering blood sacrifices to their gods. We reach all the way back to that first human who cracked a bone and sucked out the marrow. Whether we are whisking tea in a tea house; cracking a coconut in Southeast Asia; digging a pit for a Native American barbecue, a New England clambake, or a luau, preparing rice for a *selametan,* hanging hams to cure, stomping on grapes in the Mediterranean or potatoes in the Andes, stuffing vegetables or squeezing the juice out of fruit, sharing soup or breaking bread, we all do it for the same reasons: we love the food, and friends are around the fire.



"Let us live and eat in peace and good-fellowship,
for when God sends the dawn, he sends it for all."
—Sancho Panza, 1602[55]

APPENDIX A
FRENCH PRONUNCIATION

1. The Circumflex Accent: ^

This just means that the letter *s* got dropped on the way from Latin to French; it has nothing to do with pronunciation. For example, *goût* (pronounced *goo*) means "taste," which in Latin is *gustus*. *Château*—"castle"—used to be *castellum*.

2. The Letter *S*

The final *s* is not pronounced unless there is an *e* after it, and then it sounds like *z*. For example, the knife cut, *brunois*, is pronounced *broon WAH*. Add an *e*—*brunoise*—and it becomes *broon WAHZ*. The same holds true for *françois*e, *niçoise*, and all the other words that end in *ois*.

3. The Cedilla: ç

This is used to make a *c* sound like *sw*. For example, *niçoise*, as in *salade niçoise*, is pronounced *nee SWAHZ*.

4. The Final *E*

The final *e* in words like *brunoise* is not pronounced. To indicate that the *e* is supposed to be pronounced, an accent mark is added. Then the *e* is pronounced *ay*. For example, *velouté* sauce: without an accent on the final *e*, it would be pronounced *veh LOOT*, instead of *veh loo TAY*.

APPENDIX B
ITALIAN PRONUNCIATION

There are few pronunciation rules in Italian. All the letters are pronounced, and the Italian alphabet has only twenty-four, two fewer than English. The letters *j* and *k* are missing; *g* and *c* fill in for them. Some simple things to remember about Italian pronunciation:

1. Plural.

Any word that ends in *i* in Italian is already plural; do not add an *s*. For example, *ravioli* and *cannoli* are plural. *Raviolis* is incorrect. So is *cannolis*.

2. Emphasis.

The emphasis is usually on the second-to-last syllable. For example, spa GHE tti.

3. Sometimes the Letter *C* Equals the Letter *K*.

The letter *c* is pronounced hard, as in *cat*. There are two exceptions: *ce* and *ci* are pronounced *chay* and *chee*. Example: the actor Al Pacino's name is pronounced *pah CHEE no*. To keep the hard *c* sound, put an *h* between the *c* and the *e* or the *i*. Example: the Italian pasta dish *checca* is pronounced *KAY kah*.

4. Sometimes the Letter *G* Equals the Letter *J*.

The letter *g* is pronounced hard, as in *got*. There are two exceptions: *ge* and *gi* are pronounced *jay* and *jee*. Example: former New York City mayor Rudy Giuliani, pronounced *joo lee AH nee*. To keep the hard *g* sound, put an *h* between the *g* and the *e* or the *i*. Example: spaghetti. Also, the first syllable of the San Francisco chocolate company Ghirardelli is pronounced *gear*, not *jeer*.

APPENDIX C
MAJOR WARS AND BATTLES (NOT ANCIENT)

WHEN	BATTLE / WAR	WHERE	WHO FOUGHT (winner in bold)
476	Fall of Western Roman Empire	Rome	**Barbarians** invade western Roman Empire
732	# Battle of Tours	France	Muslims invade **France**
1066	Battle of Hastings	England	**France** invades England
1096–1212	# Crusades	Jerusalem	Christian Europe invades **Muslim** Levant
1279	Invasion	China	**Mongols** invade China
1337–1453	Hundred Years' War	France	England invades **France**
1453	# * Fall of Eastern Roman Empire	Turkey	Muslim **Turks** vs. Christian Eastern Roman Empire
1492	# *Reconquista*	Spain	Catholic **Spain** against Muslims, Jews
1571	# * Battle of Lepanto	Eastern Mediterranean	Catholic **Spain, the Pope, Venice** vs. Muslim Ottoman Empire
1588	# * Spanish Armada	English Channel	Catholic Spain vs. Protestant **England**
1618–48	# Thirty Years War	Europe	Catholic vs. Protestant—a draw
1642–1649	# Civil War	England	**Puritans** vs. Cavaliers
1688	# Glorious Revolution	England	**Protestant** vs. Catholic
1688–1697	War of League of Augsburg	**WORLD**	France vs. most of Europe—a draw
1701–1713	War of Spanish Succession	**WORLD**	**England, Austria, Dutch Republic, Portugal, some Germans and Italians** vs. France, Spain
1740–1748	War of Austrian Succession	**WORLD**	Prussia, France vs. **Austria, England**
1756–1763	Seven Years' War (French and Indian War, 1754–1763)	**WORLD**	**England, Americans** vs. French, Mohawk Indians
1778–1783	American Revolution	**WORLD**	**American Colonies** vs. England

WHEN	BATTLE / WAR	WHERE	WHO FOUGHT (winner in bold)
1793–1802	French Revolution	**WORLD**	**Peasants, bourgeoisie** vs. nobility
1803–1815	Napoleonic Wars	**WORLD**	France vs. **England, Russia, Spain, Belgium, Germany**
1821	Revolution	Mexico	**Mexicans** vs. Spain
1839–1842	* Opium Wars	China	China vs. **England**
1861–1865	Civil War	U.S.	Free **North** vs. slave South
1914–1918	World War I	**WORLD**	Austro-Hungarian Empire, Germany vs. **England, France, Russia, Italy, Japan**
1918–1924	Revolution/Civil War	Russia	**Communist peasants** against nobility
1939–1945	World War II	**WORLD**	Germany, Italy, Japan vs. **China** (1937–1945), **England** (1939–1945), **Russia, U.S.** (1941–1945)
1947	Independence	India	**Indians** vs. British colonial masters
1949	Revolution	Indonesia	**Indonesians** vs. Dutch colonial masters
1949	Revolution	China	**Communists** vs. Nationalists
1959	Revolution	Cuba	**Communists** vs. capitalists
1960s	Revolutions	Africa	**Africans** vs. European colonial masters

religious war; * naval battle

APPENDIX D
SELECTED COOKBOOK AND FOOD BOOKS CHRONOLOGY

Date	Country/Language	Author	Book Title	Importance
ca. 3500 B.C.	Mesopotamia/ Cuneiform	Anonymous	(fragments)	Earliest written recipes include bird bouillon
ca. 700 B.C.	India/ Sanskrit	Charaka	*Charaka Samhita*	Ayurvedic medicine/ nutrition
ca. 330 B.C.	Sicily/Greek	Archestratus	*The Life of Luxury* (fragments)	In verse; mostly about different kinds of fish
A.D. 1st c.	Rome/Latin	Apicius ("the Gourmet")	*Cookery and Dining in Imperial Rome*	First real cookbook; many sauces
10th c.	Tunisia/Arabic	*Abū Bakr al-Mālikī*	*Riyād al-nufūs*	"fabulously valuable manuscript for culinary matters"; first mention of the Arab cheese dessert *kunāfa*[1]
1061	China/Chinese	Anonymous	*The Illustrated Basic Herbal*	Hundreds of foods described; Set standards for botanical illustration in China
1215	Japan/Japanese		*Kissa Yojoki*	First treatise on tea published in Japan
1226	Muslim/Arabic	Al-Baghdadi	*A Baghdad Cookery Book*	Wide variety of foods; sugar; beginning of pastry/confection
early 13th c.	Muslim/Arabic		*Kitāb waf al-at'ima al-mutada*	94 out of 155 recipes use rose water

[1]Wright, p. 658

Date	Country/Language	Author	Book Title	Importance
13th c.	Hispano/Arabic	Anonymous	*Kitāb al-tabīkh fī al-Maghrib wa'l-Andalus*	Early written reference to couscous
c. 1300	Switzerland/French	Anonymous	*Sion Viander*	little Arab influence; little sugar, no honey
1306	France/French	Anonymous	*The Little Treatise*	Little Arab influence; few herbs or vegetables; no sugar or honey
14th c.	Naples/Latin	Anonymous	*Liber de Coquina*	First lasagna recipe
14th c.	China/Chinese	Hu Szu-hui	*Yin-shan cheng-yao* (Good and Essential Things for the Emperor's Food and Drink)	Written by Chinese-Turk in Mongol court.
c. 1370	France/French	Taillevent	*Le Viander*	Little Arab influence; little sugar; no honey
1392/1393	France/French	Anonymous	*Ménagier de Paris*	Compilation of other recipes; daily household cooking
1440	Germany	Gutenberg	*invents printing press*	books can be more widely read
1457	Rome/Latin	Apicius	*Cookery and Dining in Imperial Rome*	Vatican gets manuscript; Rome rediscovers Apicius
1474	Rome/Latin	Platina/really Maestro Martino	*De Honesta Voluptate*	First printed cookbook Contemporary Italian cooking; influenced French
1485	Nuremberg, Germany	"False Platina"	*Küchenmeisterei*	Printer falsely claimed Platina was the author
c. 1490	France/French	Taillevent	*Viander*	First printed French cookbook

Date	Country/Language	Author	Book Title	Importance
1498	Europe/Latin	Apicius	*Cookery and Dining in Imperial Rome*	Because of printing press, widely available
1502	England/English	Anonymous	*known as The Pineson Book*	First printed English cookbook
1505	France/French	Platina	*Platine en Francoys*	*De Honesta Voluptate* translated into French
1510	Brussels/Dutch	Thomas vander Noot	*Eeen Notabel Boecxke van Cokerije*	First cookbook printed in Dutch
1520	Barcelona, Spain		*Libre del coch*	Catalan cuisine
1532	Poland/Polish	Anonymous	*Kuchmistrzostwo* (The Art of Cooking and Cellaring)	First cookbook in Polish; translation of *Küchenmeisterei*
1570	Italy/Italian	Scappi	*Opera*	High Renaissance cuisine
1604	Brussels/French	Casteau	*Ouverture de Cuisine*	Italian influence on international cuisine in original, non-Medieval recipes; first *pâté à choux*
1607	France/French		*Le Thresor de santé*	Dietetics
1651	France/French	La Varenne	*Le Cuisinier françois*	Beginning of classical French cooking; first roux
1653	France/French	La Varenne	*Le Patissier françois*	Probably written with/by an Italian pastry chef
1667	Dutch	Anonymous	*The Sensible Cook*	Dutch food in Old and New Netherlands
1682	Poland/Latin	Stanislaw Czerniecki	*Compendium Fercolorum*	First original Polish cookbook

Date	Country/Language	Author	Book Title	Importance
1691	France/French	Massialot	*Cuisinier roïal et bourgeois*	First recipes organized under alphabetical headings
1742	America/ English	Eliza Smith	*The Compleat Housewife*	First cookbook published in the colonies; author is British
1746	France/French	Menon	*La Cuisinière bourgeoise*	First French cookbook directed to women
1747	England/English	Hannah Glasse	*The Art of Cookery Made Plain and Easy*	Most successful cookbook of 18th century; influenced Americans
1790	Italy/Italian	Francesco Leonardi	*L'Apicio moderno*	Heavily Neapolitan plus 3,000 international recipes; first pasta and tomato sauce recipe
1793	France/French	Madame Méridot	*La cuisine républicaine*	First French cookbook written by a woman; all potato recipes
1796	U.S./English	Amelia Simmons	*American Cookery*	First cookbook written by an American and published in U.S; chemical leavening, cookies, pumpkin pie
1810	France/French	Nicolas Appert	*L'Art de Conserver Pendant Plusieurs Années Toutes les Substances Animales et Végétales*	First book on food preservation by canning
1816	Russia/Russian	Chef Levshin	*The Russian Kitchen*	First Russian cookbook

Date	Country/Language	Author	Book Title	Importance
1824	U.S./English	Mary Randolph	*The Virginia Housewife*	Considered by some the most influential cookbook in 19th century U.S.
1829	U.S./English	Lydia Maria Child	*The Frugal Housewife*	Reprinted at least 35 times
1839	Naples/Italian	Ippolito Cavalcanti	*La cucina teorico-pratica*	Italian without French influence; one of the first truly regional cookbooks
1841	U.S./English	Sarah Josepha Hale	*Early American Cookery*	
1841	U.S./English	Catharine Beecher	*Treatise on Domestic Economy*	Anatomy, democracy, health, and diet
1859–1861	Britain/English	Isabella Beeton	*Beeton's Book of Household Management*	Middle-class British Victorian cooking
1861	Russia/Russian	Elena Molokhovet	*A Gift to Young Housewives*	Bestseller, more than 4,000 recipes
1864	Australia/English	Edward Abbott	*The English and Australian Cookery Book*	First Australian cookbook
1881	U.S./English	Mrs. Abby Fisher	*What Mrs. Fisher Knows About Old Southern Cooking*	First African-American cookbook; author illiterate
1881	U.S./English	Ellen Richards	*The Chemistry of Cooking and Cleaning*	First woman Ph.D. from MIT; chemistry in cooking
1891	Italy/Italian	Pellegrino Artusi	*La Scienza in Cucina e L'arte di Mangiar Bene*	Cornerstone of the Italian culinary tradition
1896	U.S./English	Fannie Farmer	*The Boston Cooking School Cook Book*	Effects of industrialization on cooking
1898	U.S./Spanish	Encarnación Pinedo	*El cocinero español*	First Spanish-language cookbook printed in U.S.

Date	Country/Language	Author	Book Title	Importance
1901	U.S.	Lizzie Black Kander	*The Settlement Cookbook: The Way to a Man's Heart*	Jewish and Jewish-American recipes
1903	France/French	Escoffier	*Le Guide Culinaire*	5,000 recipes from the master; translated into English in 1979
1910	Poland/Polish	Marja Ochorowicz-Monatowa	*Uniwersalna Ksiāka Kucharska (The Universal Cook Book)*	Bible of Polish cooking; translated into English and "adapted" in 1958.
1927	France/French	Mme. St. Ange	*Le Livre de Cuisine*	Influenced Julia Child
1930s	Italy/Italian	Filippo Marinetti	*The Futurist Cookbook*	Mult-media food
1931	U.S./English	Irma Rombauer	*The Joy of Cooking*	3,000 copies self-published by widow become best-selling cookbook
1936	U.S./English	Apicius	*Cookery and Dining in Imperial Rome*	First English translation published in the United States, by Vehling
1938	French	Prosper Montagné	*Larousse Gastronomique*	Encyclopedia
1941	U.S./English	Frank Schoonmaker	*American Wines*	
1960	Britain/English	Elizabeth David	*French Provincial Cooking*	Influenced generations of cooks
1961	U.S./English	Simone Beck, Julia Child, Bertholle	*Mastering the Art of French Cooking*	Makes French cooking accessible to Americans; revolution in American cooking
1968	U.S./English	Claudia Roden	*A Book of Middle Eastern Food*	Comprehensive with medieval recipes

Date	Country/Language	Author	Book Title	Importance
1970	U.S./English	Harva Hachten	*Best of Regional African Cooking*	First continent-wide African cookbook
1971	U.S./English	George Lang	*The Cuisine of Hungary*	Recipes and history of Hungarian cuisine by the restaurateur
1973	U.S./English	Madhur Jaffrey	*An Invitation to Indian Cooking*	Regional, accessible, written for Americans; "perhaps the best Indian cookbook available in English"—Craig Claiborne
1973	U.S./English	Molly Katzen	*The Moosewood Cookbook*	Vegetarian, spiced up and ethnic
1979	English	Escoffier	*The Culinary Guide*	First English translation
1981	U.S./English	Jennifer Brennan	*The Original Thai Cookbook*	First Thai cookbook published in the U.S.
1982	U.S./English	Alice Waters	*The Chez Panisse Menu Cookbook*	Seminal California French
1982	U.S./English	Nathan Pritikin	*The Pritikin Promise*	Extra-lean diet
1983	U.S./English	Dean Ornish, M.D., and Martha Rose Shulman	*Stress, Diet, & Your Heart*	First heart-healthy cookbook
1984	U.S./English	Harold McGee	*On Food and Cooking*	Chemistry; "the science and lore of the kitchen"
1989	U.S./English	Julee Rosso and Sheila Lukins	*The New Basics*	Reflects the changes that had been occurring in American cuisine
1991	U.S./English	Ayla Algar	*Classical Turkish Cooking*	Excellent historical information and recipes
1996	Italy/French	Flandrin and Montanari, eds.	*Histoire de l'alimentation*	Invaluable

Date	Country/Language	Author	Book Title	Importance
1999	U.S./English	(in English, Sonnenfeld)	*English title: Food: From Antiquity to the Present*	
1998	U.S./English	Ntozake Shange	*If I Can Cook/You Know God Can*	African food and history book with a poetic soul
1998	U.S./English	Özcan Ozan	*The Sultan's Kitchen*	Turkish, with color pictures
1999	England	Alan Davidson, ed.	*The Oxford Companion to Food*	Encyclopedia
2000	U.S./English	Clifford Wright	*A Mediterranean Feast*	Massive combination of 500 recipes plus history
2000	U.S./English	Su-Mei Yu	*Cracking the Coconut*	Thai by a Thai
2001	U.S./English	Eric Schlosser	*Fast Food Nation*	Examines the way many Americans eat now
2002	U.S./English	Marion Nestle	*Food Politics*	First hard political/food history
2003	U.S./English	Encarnación Pinedo; Dan Strehl, ed. and trans.	*Encarnación's Kitchen, Selections from El Cocinero Español*	Selections from the first cookbook written by a Hispanic in the U.S.
2004	U.S./English	Andrew Smith, ed.	*Oxford Companion to Food and Drink in America*	First American food encyclopedia
2004	U.S./English and Farsi	Najmieh Batmanglij	*New Food of Life: Ancient Persian and Modern Iranian Cooking and Ceremonies*	Bold, uncompromising
2006	U.S./English	Michael Pollan	*The Omnivore's Dilemma*	Difficult questions about the meaning of organic

Notes

First Course

1. Pyne, *World Fire*, 3.
2. *LA Times*, July 11, 2002, 1.
3. Brothwell, *Food in Antiquity,* 32.
4. Tannahill, *Food in History,* 32.
5. Klein and Edgar, *Dawn of Human Culture*, 156.
6. Flandrin and Montanari, *Food*, 17.
7. *Ibid*., 144.
8. Tannahill, *Food in History,* 15.
9. Achaya, *Indian Food,* 5.
10. Cass, *Dancing Through History*, ix.
11. *Ibid*., 3–8.
12. *Ibid*., 7.
13. Frazer, *The Golden Bough*, 21; cave art as sympathetic magic, 24. See also Janson, *A Basic History of Art*, 32–35.
14. Brothwell, *Food in Antiquity,* 19.
15. Achaya, *Indian Food,* 3.
16. *Ibid*., 202–203.
17. *Ibid*., 199.
18. Klein, *The Dawn of Human Culture*, 17.
19. McGee, *On Food and Cooking,* 234.
20. *Ibid*., 275.
21. Rod Phillips, *A Short History of Wine,* xvi.
22. Brothwell, *Food in Antiquity,* 194.
23. Woodier, *Apple Cookbook*, 1–2.
24. Courtwright, *Forces of Habit, 9*.
25. Brothwell, *Food in Antiquity,* 165.
26. McGee, *On Food and Cooking,* 370.
27. Davidson, *Oxford Companion to Food*, 384.
28. There was an early civilization around the Niger River in Africa, but there is little information.
29. Phillips, *Wine,* 24.
30. Spodek, *World's History,* 48–49.
31. *Ibid*, 49.
32. Brothwell, *Food in Antiquity,* 166.
33. Flandrin and Montanari, *Food*, 40.
34. Bottero, *Oldest Cuisine,* 43.
35. *Ibid*., 112–113.
36. *Ibid*., 114.
37. *Ibid*., 117.
38. *Ibid*., 26.
39. *Ibid*., 29–30.
40. *Ibid*., 35.
41. *Ibid*., 81.
42. *Ibid*., 81.
43. Flandrin and Montanari, *Food,* 35.
44. *Ibid*., 19.
45. Bottero, *Oldest Cuisine,* 118–120.
46. Tannahill, *Food in History*, 47.
47. http://news.nationalgeographic.com/news/2001/05/0518_crescent.html
48. Woodier, *Apple Cookbook*, 2.
49. Roden, *Middle Eastern Food,* 268.
50. *Ibid*, 268.
51. Spodek, *World's History*, 71.
52. McGee, *On Food and Cooking,* 170–171.
53. History Channel, "Egypt Beyond the Pyramids."
54. Flandrin and Montanari, *Food*, 13; Brothwell, Food in Antiquity, 54.
55. History Channel, "Egypt Beyond the Pyramids."
56. Tannahill, *Food in History,* 52–53.
57. Bresciani, "Food Culture in Ancient Egypt", in *Food,* 39.
58. Zborowski and Herzog, *Life Is With People,* 368.
59. *Ibid*., 368–369.
60. The Holy Bible (Cleveland: The World Publishing Company, 1962), 53. *Exodus,* 5–11.
61. *Exodus,* 12; Zborowski and Herzog, *Life Is With People*, 388–89.
62. Anderson, *Food of China*, 45.
63. Kurlansky, *Salt*, 19–21.
64. Miller, *The Spice Trade,* 43.
65. http://www.math.nus.edu.sg/aslaksen/calendar/chinese.shtml
66. http://www.chinascape.org/china/culture/holidays/hyuan/newyear.html#origin
67. http://www.new-year.co.uk/chinese/history.htm
68. Kurlansky, *Salt*, 31.
69. Achaya, *Indian Food,* 18–29.
70. *Ibid*., 11.
71. *Ibid*., 18.
72. Morningstar with Desai, *The Ayurvedic Cookbook,* 3.
73. Achaya, *Indian Food*, 110, 113, 108, 111.

74. *Ibid*., 38.
75. Farb, *Consuming Passions,* 141–146.
76. Anderson, *Food of China*, 6.

Second Course

1. Toussaint-Samat, *History of Food*, 299–301.
2. Tannahill, *Food in History,* 61.
3. Farb, *Consuming Passions,* 62.
4. Amouretti, "Urban and Rural Diets in Greece," in *Food,* 82.
5. Montanari, "Introduction: Food Systems and Models of Civilization," in *Food,* 69.
6. In Greek, the final "e" is pronounced like the double e in "beet." For example, the Greek goddess of victory, Nike—"Nigh kee."
7. Depending on which translation. *Handbook of Greek Mythology* says pennyroyal; Hamilton's *Mythology* says barley-water and mint.
8. Courtwright, *Forces of Habit,* 10.
9. Flandrin and Montanari, *Food*, 94.
10. Vetta, "The Culture of the Symposium, 96-105, in *Food.*
11. *Ibid*., 97.
12. Archestratus, *The Life of Luxury,* 21.
13. Vetta, "Symposium," in *Food,* 100.
14. Asimov, *Words of Science*, 20; *Oxford English Dictionary.*
15. Taylor, *Olive in California,* 7.
16. Davidson, *Oxford Companion,* 551–553.
17. Taylor, *Olive in California,* various.
18. Davidson, *Oxford Companion,* 553
19. Tannahill, *Food in History,* 65.
20. Amouretti, "Urban and Rural Diets in Greece," in *Food,* 82.
21. Brothwell, *Food in Antiquity,* 201.
22. Flandrin and Montanari, *Food*, 288.
23. Grant, *Founders of the Western World*, 68.
24. Flandrin and Montanari, *Food,* 87, quoting Antiphanes in *Apud Athenaeum, 370e.*
25. Toussaint-Samat, *History of Food*, 622.
26. An identical statue is in Rome, Georgia. Italian dictator Benito Mussolini sent the copy in 1929 as a gift from one Rome to the other to honor the opening of a Georgia silk mill whose parent company was in Italy. During World War II, when Italy was America's enemy, the American statue had to be taken down and hidden after angry citizens threatened to blow it up.
27. Kennedy, *Founders of the Western World,* 144–145.
28. Tannahill says the Romans preserved the land and grew grain on it, *Food in History,* (72–73).
29. Bober, *Art, Culture, & Cuisine,* 190.
30. Miller, *Spice Trade of the Roman Empire,* 23, 278, 279.
31. Woodier, *Apple Cookbook*, 2.
32. Tannahill, *Food in History,* 64.
33. Davidson, *Oxford Companion,* 672–673.
34. Phillips, *Wine,* 34.
35. *Ibid*., 34.
36. *Ibid*., 35.
37. Toussaint-Samat, *History of Food,* 296–297.
38. The male warrior society of Rome assumed that bee society was just like theirs: headed by a powerful male, like an emperor bee, who brought all the other bees out to wage war. The idea of a queen did not occur to them. *The Year 1000*, 139.
39. Farrar, *Ancient Roman Gardens*, triclinium, 40-41; treehouse, 57.
40. Shelton, *As the Romans Did*, 75–78.
41. *Ibid*., 83–84, quoting *Geoponica* 20.46.1–5.
42. *Ibid*., 130–131.
43. Vehling, *Apicius*, 9–11.
44. *Ibid*., xiv.
45. Flandrin and Montanari, *Food*, 134.
46. *Ibid*., 137.
47. Vehling, *Apicius*, 161.
48. *Ibid*., fn, 114–115.
49. Brothwell, *Food in Antiquity,* 48–49.
50. *Ibid*., 52.
51. Kennedy, *Western World,* 263.
52. www.gardenmedicinals.com
53. History Channel, "The XY Factor: The History of Sex: Ancient Civilizations."
54. www.gmu.edu/departments/fld/classics/apicius4.html; accessed May 7, 2003.
55. *Ibid*., 112, 46–47, 111, 129, 102.
56. Shelton, *As the Romans Did,* 79.
57. Tannahill, *Food in History,* 74–76.
58. Flandrin and Montanari, *Food,* 136.
59. Shelton, *As the Romans Did,* 72–74.
60. Flandrin and Montanari, *Food*, 135.
61. Lacey and Danziger, *The Year 1000,* 12–13, 53.
62. Visser, *Much Depends on Dinner,* 77.
63. Diamond, *Guns, Germs, and Steel,* 205, 207.
64. Beck, et al., *World History,* 152.
65. Flandrin and Montanari, *Food*, 129–130.
66. McNeill, *Plagues and Peoples,* 107–108.
67. Garnsey, *Food and Society in Classical Antiquity*, 68.
68. Miller, *Spice Trade,* 25.

Third Course

1. Phillips, *Short History of Wine,* 75.
2. *Oxford English Dictionary*, Vol. I, 1557, 1663.
3. Flandrin and Montanari, *Food,* 309–311.
4. Flandrin and Montanari, 308; Rawcliffe, *Medicine and Society,* 33; Wheaton, *Savoring the Past,* 35; Farb, *Consuming Passions,* 119.
5. Flandrin and Montanari, *Food*, 318.
6. *Ibid.,* 407, 421.
7. *Ibid.*, 316–317.
8. *Ibid.*, 422.
9. *Ibid.*, 314.
10. Farb, *Consuming Passions,* 121.
11. www.ostvik.org/articles/viking_food.html, accessed 10/4/2005.
12. Phillips, *Wine,* 85.
13. McGee, *On Food and Cooking,* 236.
14. http://www.saudiembassy.net/Travel/Calendar-05.asp, accessed 10/30/05.
15. http://www-lib.usc.edu/~jnawaz/ISLAM/PILLARS/FastFiqh.html
16. Achaya, *Indian Food,* 160.
17. Henisch, *Fast and Feast,* 106.
18. Wright, *Mediterranean Feast*, 118.
19. Roden, *A Book of Middle Eastern Food,* 234.
20. *Ibid.*, 246–248.
21. *Ibid.*, 250–251.
22. *Ibid.*, 277.
23. *Ibid.*, 305 (*imam bayaldi*), 302 (filling).
24. Wright, *Mediterranean Feast*, 325.
25. *Ibid.*, 303.
26. *Ibid.*, 499.
27. Davidson, *Oxford Companion,* 523.
28. Flandrin and Montanari, *Food*, 208.
29. Pendergrast. *Uncommon Grounds,* 4.
30. *Ibid.*, 5–6.
31. *Ibid.,* 12.
32. *Ibid., 6.*
33. *Ibid.*, 7–18.
34. Flandrin and Montanari, *Food,* 189.
35. *Ibid.*
36. Glants and Toomre, *Food in Russian History and Culture*, 29, n. 34; 20, n.21.
37. Dalby, *Flavours of Byzantium,* 65.
38. *Ibid.*, 133–146.
39. *Ibid.*, 147–160.
40. *Ibid.*, 161–162.
41. *Ibid.*, 163–169.
42. Dalby, *Dangerous Tastes: the Story of Spices,* 86–87.
43. Riley-Smith, *Crusades,* 49.
44. Levenson, *Habeas Codfish*, 13.
45. Flandrin and Montanari, *Food,* 281.
46. *Ibid.*, 275.
47. Phillips, *Wine,* 111.
48. *Ibid.,* 85.
49. Chianti gained more fame in the movie *Silence of the Lambs* with Hannibal "the Cannibal" Lecter's remark about one of his victims: "I ate her liver with some fava beans and a nice Chianti."
50. Phillips, *Wine, 98–99.*
51. *Ibid.*, *96.*
52. *Ibid.*, 104–105.
53. *Ibid.*, 107–111.
54. Flandrin and Montanari, *Food*, 117–119.
55. Lacy and Danziger, *The Year 1000*, 137.
56. Cass, *Dancing Through History*, 41.
57. Quoted in Wheaton, *Savoring the Past, 6.*
58. *Ibid., 7.*
59. Davidson, *Oxford Companion,* 12.
60. Beecher, *Domestic Receipt-Book,* 177.
61. Rombauer, *et al., Joy of Cooking* (1997), 1039.
62. *Ibid.*, 16.
63. Willan, *Great Cooks and Their Recipes*, *9*.
64. Elias, *Manners, Vol. 1,* blow nose, 64; spit on table, 153; helmet on, 87; clean teeth with knife, 87; gnaw on bone, 64, 85; pick nose, 64, 88.
65. Willan, *Great Cooks, 9*.
66. *Cooking Live,* 11/5/01, Elizabeth Ryan, pomologist.
67. Woodier, *Apple Cookbook,* 42.
68. www.silk-road.com/artl/marcopolo.shtml
69. Wright, *Mediterranean Feast*, 622.

Fourth Course

1. Anderson, *Food of China*, 65.
2. *Ibid.*, 58.
3. Kurlansky, *Salt*, 35.
4. Anderson, *An Introduction to Japanese Tea Ritual*, 14–15.
5. Anderson, *Food of China,* 63.
6. Chang, *Food in Chinese Culture*, 169.
7. *Ibid.*, 151, 147.
8. Anderson, *Food of China, 79.*
9. Chang, *Food in Chinese Culture,* 151.
10. *Ibid.*, 149.
11. Anderson, *Food of China,* 84.
12. Buell, "Mongol Empire and Turkicization," 207.
13. *Ibid.*, 213.
14. For an excellent fictitious telling of the story of this colony, see Jane Smiley's

novel, *The Greenlanders*.
15. Kagan, *et al., Western Heritage,* 298.
16. http://www.crs4.it/~riccardo/Letteratura/Decamerone/Ottava/8_03.htm
17. Schama, "History of Britain," PBS.
18. Le Goff, *The Medieval World*, 116.
19. Flandrin and Montanari, *Food*, 313.
20. Davidson, *Oxford Companion,* 232.
21. Flandrin and Montanari, *Food*, 319.
22. *Ibid*., 307, 303.
23. Klapisch-Zuber, *Women, Family, and Ritual in Renaissance Italy*, 106–107.
24. Burke, *The Italian Renaissance*, 70.
25. Willan, *Great Cooks,* 23.
26. Davidson, *Oxford Companion,* 613.
27. *Ibid*., 144.
28. Barer-Stein, *You Eat What You Are*, 397.
29. Chamberlin, *Bad Popes,* 167.
30. Davidson, *Oxford Companion,* 367.
31. Algar, *Classical Turkish Cooking,* 10.
32. *Ibid*., 11.
33. Flint, *The Imaginative Landscape of Christopher Columbus*, 4–5.
34. Kamen, *Inquisition and Society in Spain*, 11.
35. www.press.uchicago.edu/Misc/Chicago/101363.html
36. Sokolov, *Why We Eat What We Eat,* 86.
37. *Oxford English Dictionary,* 559.
38. Fussell, *The Story of Corn,* 17.
39. Beck, et al., *World History,* 213.
40. Coe, *America's First Cuisines*, 174–175.
41. *Ibid*., 182.
42. Fussell, *Corn*, 249–250.
43. McGee, *On Food and Cooking,* 170.
44. Sokolov, *Why We Eat What We Eat,* 82.
45. *Ibid.,* 83.
46. Coe, *America's First Cuisines,* 98.
47. *Ibid*., 111.
48. *Ibid*., 110.
49. Coe and Coe, *True History of Chocolate,* 89–93.
50. *Ibid*., 97.
51. *Ibid*., 98.
52. Coe, *First Cuisines*, 97.
53. *Ibid*., 99–100.
54. *Ibid*., 100–101.
55. Nabhan, *Gathering the Desert*, 123–124.
56. *Ibid*., 126.
57. *Ibid*., 128.
58. Dor-Ner, *Columbus and the Age of Discovery*, 119.
60. *Ibid*., 120.
61. *Ibid*., 133–134.
62. *Ibid*., 118.
63. *Ibid*., 125.
64. No one is sure exactly which island this is.
65. *Ibid*., 149.

Fifth Course

1. Crosby, *Columbian Exchange*, 106.
2. *Ibid*., 79.
3. *Ibid*., 53.
4. Silverberg, *Pueblo Revolt*, 63.
5. Coe, *America's First Cuisines,* 70–71.
6. Roueché, *Medical Detectives, Vol. II*, 19. In 1980, the World Health Organization declared smallpox eradicated, but after September 11, 2001, and the threat of bioterrorism, the United States resumed limited smallpox vaccinations.
7. Coe and Coe, *Chocolate,* 216–218.
8. Bayless, *Mexican Kitchen*, 276, 286–287.
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